

**A Thesis Submitted for the Degree of PhD at the University of Warwick**

**Permanent WRAP URL:**

<http://wrap.warwick.ac.uk/100403>

**Copyright and reuse:**

This thesis is made available online and is protected by original copyright.

Please scroll down to view the document itself.

Please refer to the repository record for this item for information to help you to cite it.

Our policy information is available from the repository home page.

For more information, please contact the WRAP Team at: [wrap@warwick.ac.uk](mailto:wrap@warwick.ac.uk)

**Exploring the Assessment Process on a Ward  
for Older People:  
A Constructivist Grounded Theory**

**By**

**Hanneke Wiltjer**

A thesis submitted in fulfilment of the requirements for the degree of  
Doctor of Philosophy in Nursing

University of Warwick, Division of Health Sciences

June 2017

<b>LIST OF BOXES</b>	<b>9</b>
<b>LIST OF FIGURES</b>	<b>9</b>
<b>LIST OF TABLES</b>	<b>9</b>
<b>LIST OF ABBREVIATIONS</b>	<b>10</b>
<b>ACKNOWLEDGEMENTS</b>	<b>12</b>
<b>DECLARATION</b>	<b>13</b>
<b>ABSTRACT</b>	<b>14</b>
<b>CHAPTER 1: INTRODUCTION</b>	<b>15</b>
<b>CHAPTER 2: LITERATURE REVIEW</b>	<b>20</b>
<b>2.1 OLDER PEOPLE</b>	<b>21</b>
<b>2.2 CONTEXTUAL AND CULTURAL ASPECTS OF THE CARE OF OLDER PEOPLE</b>	<b>24</b>
2.2.1 INTRODUCTION TO CONTEXT	24
2.2.2 THE CONTEXT OF THE CARE OF OLDER PEOPLE IN THE UK	24
2.2.2.1 The development of the care system and the care settings	24
2.2.2.2 Education	27
2.2.2.3 Attitudes towards the care for older people	27
2.2.2.4 Summary	30
2.2.3 INTRODUCTION TO CULTURE	30
2.2.4 CULTURAL ASPECTS OF INPATIENT CARE OF OLDER PEOPLE	31
2.2.4.1 Person-Centred Care	31
2.2.4.2 Shared Decision Making	34
2.2.4.3 Teamwork	35
2.2.5 SUMMARY	42
<b>2.3 ASSESSING THE NEEDS OF OLDER PEOPLE IN HOSPITAL</b>	<b>42</b>
2.3.1 THE ORIGIN AND DEVELOPMENT OF ASSESSMENT OF OLDER PEOPLE	43
2.3.2 PURPOSES OF CGA	46
2.3.3 A SYSTEMATIC REVIEW ON THE EFFECTIVENESS OF WARD-BASED CGAS	48
2.3.3.1 Aim of the systematic review	48
2.3.3.2 Search strategy	48
2.3.3.3 Inclusion and exclusion criteria	49
2.3.3.4 Findings	54
2.3.3.5 Summary	57
2.3.4 THE PERCEIVED VALUE OF CGAS IN CLINICAL PRACTICE	59

2.3.5 Current assessment practice on wards for older people	60
<b>2.4 SUMMARY</b>	<b>62</b>
 <b>CHAPTER 3: METHODOLOGY AND METHODS</b>	 <b>64</b>
 <b>3.1 AN INTRODUCTION TO THE PHILOSOPHY OF SCIENCE</b>	 <b>64</b>
3.1.1 THE MAIN IDEAS	64
3.1.2 PARADIGMS	65
3.1.2.1 Positivism	67
3.1.2.2 Post-positivism	67
3.1.2.3 Constructivism	68
3.1.2.4 Pragmatism	69
3.1.2.5 Critiquing different paradigms	70
3.1.3 PARADIGM FOR THIS THESIS	71
<b>3.2 RESEARCH METHODOLOGIES</b>	<b>72</b>
3.2.1 METHODOLOGIES WITH A QUALITATIVE APPROACH	73
3.2.1.1 Phenomenology	73
3.2.1.2 Ethnography	75
3.2.1.3 Case study	77
3.2.1.4 Grounded Theory	77
3.2.2 METHODOLOGY FOR THIS THESIS	79
<b>3.3 GROUNDED THEORY</b>	<b>80</b>
3.3.1 THE EVOLUTION OF GROUNDED THEORY	80
3.3.1.1 Glaserian Grounded Theory	82
3.3.1.2 Grounded Theory by Strauss and Corbin	84
3.3.1.3 Constructivist Grounded Theory by Charmaz	88
3.3.2 THE THREE GROUNDED THEORY APPROACHES DISCUSSED	90
<b>3.4 RIGOUR AND LIMITATIONS</b>	<b>92</b>
3.4.1 CRITERIA FOR THE EVALUATION OF RIGOUR IN GROUNDED THEORY RESEARCH	92
3.4.2 LIMITATIONS OF GROUNDED THEORY	95
<b>3.5 METHODS</b>	<b>95</b>
3.5.1 SETTING	95
3.5.2 SAMPLE	97
3.5.3 SAMPLING	97
3.5.4 SATURATION	98
3.5.5 DATA COLLECTION	99
3.5.5.1 Observation	99
3.5.5.2 Interviews	100
3.5.5.3 Focus group	101
3.5.5.4 Document review	102
3.5.6 DATA ANALYSIS	102
3.5.7 THEORETICAL SENSITIVITY	103
3.5.8 REFLEXIVITY	104

<b>3.6 ETHICAL CONSIDERATIONS</b>	<b>105</b>
3.6.1 ETHICAL APPROVAL	105
3.6.2 RECRUITMENT AND INFORMED CONSENT	106
3.6.2.1 Professionals	106
3.6.2.2 Patients	106
3.6.3 CONFIDENTIALITY AND ANONYMITY	108
3.6.4 SAFETY	108
3.6.5 DATA STORAGE	109
3.6.6 INDEMNITY/SPONSORSHIP	110
3.6.7 FUNDING	110
3.6.8 AUDITS AND INSPECTIONS	110
3.6.9 CONFLICT OF INTEREST	110
<b>3.7 SUMMARY</b>	<b>110</b>
 <b>CHAPTER 4: FINDINGS</b>	 <b>111</b>
 <b>4.1 PARTICIPANTS</b>	 <b>111</b>
<b>4.2 AN INTRODUCTION TO ‘NAVIGATING’</b>	<b>113</b>
<b>4.3 THEME: CONTAINING COMPLEXITY</b>	<b>114</b>
4.3.1 ELEMENTS OF ASSESSMENT	115
4.3.1.1 Step 1: Knowing	116
4.3.1.2 Step 2: Understanding	118
4.3.1.3 Step 3: Acting	120
4.3.2 WAYS OF WORKING	123
4.3.2.1 Levels of formality	123
4.3.2.2 Levels of visibility	129
4.3.2.3 Prioritising and separating care processes into tasks	131
4.3.3 MANAGING COMPETING DEMANDS	135
4.3.4 SUMMARY	136
<b>4.4 THEME: NETWORKING</b>	<b>137</b>
4.4.1 NETWORKING BETWEEN PROFESSIONALS	137
4.4.1.1 Multi-disciplinary teamwork	137
4.4.1.2 The role of the nurse	140
4.4.1.3 Verbal communication	148
4.4.1.4 Written communication	151
4.4.2 NETWORKING BETWEEN PATIENTS AND PROFESSIONALS	155
4.4.2.1 Professionals updating the patient	155
4.4.2.2 Involving patients into the decision-making process	157
4.4.3 SUMMARY	159
<b>4.5 THEME: SITUATING THE PROCESS</b>	<b>160</b>
4.5.1 MEETING INDIVIDUAL PATIENT NEEDS	160
4.5.1.1 Individualising patient care	160
4.5.1.2 Assessing patients with cognitive impairment	161

4.5.2 DAILY WARD LIFE	162
4.5.2.1 Practicalities	162
4.5.2.2 Practice guidelines	164
4.5.3 SUMMARY	165
<b>4.6 THE CORE CATEGORY 'NAVIGATING'</b>	<b>166</b>
4.6.1 THE CONCEPTUAL FRAMEWORK 'NAVIGATING'	166
4.6.2 THE CORE CATEGORY 'NAVIGATING'	168
<b>4.7 SUMMARY</b>	<b>173</b>
 <b>CHAPTER 5: DISCUSSION</b>	 <b>175</b>
<b>5.1 DISCUSSING THE CONCEPTUAL FRAMEWORK 'NAVIGATING'</b>	<b>175</b>
<b>5.2 WHAT THIS STUDY ADDS TO THE LITERATURE</b>	<b>201</b>
<b>5.3 REFLECTING ON THE RESEARCH PROCESS</b>	<b>203</b>
5.3.1 PERSONAL DEVELOPMENT	203
5.3.2 THE RESEARCH PROCESS	206
5.3.2.1 Interviewing	207
5.3.2.2 Observation	208
5.3.2.3 Development of the Grounded Theory	210
5.3.2.4 Reaching saturation	212
<b>5.4 RIGOUR OF THE STUDY</b>	<b>213</b>
5.4.1 TRUSTWORTHINESS AND AUTHENTICITY	213
5.4.2 ORIGINALITY AND USEFULNESS	214
<b>5.5 STRENGTHS AND LIMITATIONS</b>	<b>215</b>
<b>5.6 SUMMARY</b>	<b>218</b>
 <b>CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS</b>	 <b>219</b>
<b>6.1 CONCLUSIONS</b>	<b>219</b>
6.1.1 AN IDEAL STEEPED IN REALITY	219
6.1.2 CHANGING REALITY TO MEET THE IDEAL	224
<b>6.2 RECOMMENDATIONS</b>	<b>225</b>
6.2.1 CLINICAL PRACTICE	226
6.2.2 EDUCATION	226
6.2.3 RESEARCH	227
6.2.4 POLICY	228
<b>6.3 THE LAST WORD</b>	<b>229</b>
<b>6.4 A FINAL THOUGHT</b>	<b>230</b>
 <b>REFERENCES</b>	 <b>231</b>
 <b>APPENDICES</b>	 <b>285</b>

<b>APPENDIX 1, SEARCH STRATEGIES FOR SYSTEMATIC REVIEW</b>	<b>286</b>
<b>APPENDIX 2, CHARACTERISTICS AND CONCLUSIONS OF STUDIES INCLUDED IN THE SYSTEMATIC REVIEW</b>	<b>289</b>
<b>APPENDIX 3, INTERVIEW PROMPTS</b>	<b>312</b>
<b>APPENDIX 4, DOCUMENT FOR FOCUS GROUP DISCUSSING PRELIMINARY FINDINGS</b>	<b>314</b>
<b>APPENDIX 5, DOCUMENT REVIEW</b>	<b>317</b>
<b>APPENDIX 6, APPROVAL LETTER NATIONAL RESEARCH ETHICS SERVICE</b>	<b>318</b>
<b>APPENDIX 7, APPROVAL LETTER RESEARCH AND DEVELOPMENT</b>	<b>320</b>
<b>APPENDIX 8, WARD POSTER</b>	<b>322</b>
<b>APPENDIX 9, INFORMATION SHEET FOR PROFESSIONALS</b>	<b>323</b>
<b>APPENDIX 10, INFORMED CONSENT FORM FOR PROFESSIONALS</b>	<b>329</b>
<b>APPENDIX 11, INFORMATION SHEET FOR PATIENTS</b>	<b>332</b>
<b>APPENDIX 12, INFORMED CONSENT FORM FOR PATIENTS</b>	<b>339</b>
<b>APPENDIX 13, CONFIRMATION OF SPONSORSHIP</b>	<b>343</b>
<b>APPENDIX 14, CHARACTERISTICS OF PATIENT PARTICIPANTS</b>	<b>344</b>
<b>APPENDIX 15, EXAMPLES OF CODED RAW DATA</b>	<b>345</b>

## List of Boxes

---

Box 1, Basic search string	49
Box 2, Definition of 'Navigating'	113

## List of Figures

---

Figure 1, Literature search flow diagram.	53
Figure 2, Elements of assessment	115
Figure 3, Conceptual framework of 'Navigating'	166

## List of Tables

---

Table 1, Included professionals per discipline per data collection method	112
Table 2, Overview of observations and document reviews	112
Table 3, Reasons patients declined participation	113
Table 4, Coding tree with core category, themes and codes	113
Table 5, Codes within theme 'Containing complexity'.	114
Table 6, Codes within theme 'Networking'.	137
Table 7, Codes within theme 'Situating the process'.	160



## List of Abbreviations

---

ACE	Acute Care for Elders
ADL	Activities of Daily Living
CGA	Comprehensive Geriatric Assessment
CSP	Chartered Society of Physiotherapists
DR	Document Review
EBP	Evidence Based Practice
EH	Estimated Hedges' $g_u$
GEMU	Geriatric Evaluation and Management Unit
GMC	General Medical Council
HCA	Health Care Assistant
HCP	Health Care Professional
HELP	Hospitalized Elder Life Program
IGCS	Inpatient Geriatric Consultation Service
LOS	Length of stay
MCA	Mental Capacity Act
NHS	National Health Service
NICHE	Nurses Improving Care for Health system Elders
NMC	Nursing and Midwifery Council
NRES	National Research Ethics Service
OR	Odds Ratio
PCC	Person Centred Care
QoL	Quality of Life
RCN	Royal College of Nursing

RCT	Randomised Clinical Trial
RR	Relative Risk
SDM	Shared Decision Making
SMD	Standardised Mean Difference
UK	United Kingdom
WHO	World Health Organization

## Acknowledgements

---

First, I would like to thank everyone who has participated in this research study. To all patients and health care professionals who agreed to take part, giving me some of your time, thank you so much for being kind and willing to answer my endless questions. Without you this research would not have been done, and this thesis would not have been written.

Over the years many people have supported me throughout this PhD-process. Friends and colleagues have listened to study related worries, made me cups of tea, bought me cups of coffee, supplied me with chocolate and cake, driven me around, provided supportive hugs, believed in me when I was struggling, and lifted my mood when I was tired and stressed. It meant a lot to me. I thank you all!

Then there are a few people I would like to mention by name. I'll start with the two people who have pulled me through, pushed me forward, and at times had to hold me up and keep me together. Kate and Liz, you have been my lifelines, not only providing academic guidance, but also by making sure I was doing OK. I cannot thank you enough for that. You taught me to see the world in nuances and colours, rather than just in black and white. And although I will probably always stay true to my Dutch heritage, your patience and tactful advice have been valuable lessons in English politeness. Your professionalism and boundless knowledge have given me something to aspire to. I could not have done this PhD without either of you. Thank you for everything.

I would like to thank my brothers and sisters for believing in me. Arjan, almost annually you have made time to come over for a visit. Thank you for reducing the distance and making it seem as if home is a little bit closer. Marloes, our ongoing app conversation is an important part of my day, and sometimes makes me forget we live in different countries. It is invaluable to have someone only an app away to provide moral support and to share experiences with. Thank you for being not only my sister, but also a best friend. Marco and Marjoleijn, many years ago I arranged for an urgent dinner in Utrecht to discuss future plans. You both promised to support me in whatever way I would need it. As it turned out I have needed quite a lot of support over the years and I cannot thank you enough for giving it so readily and willingly. I would not have been able to have done this PhD without your help and support. Thank you for always being in my corner.

I also want to thank my mum and dad. I love the two of you so much. Thank you for teaching me the values of independence and perseverance, it has helped me to get to where I am now. You have always supported me, no matter the choices I have made and the directions I have taken, always right there to cheer me on. Whether it was a Skype call, an email, an app, a picture, a postcard, or packages full of Dutch sweets, it all helped me to keep going and not give in to insecurities, stress, and tiredness. Thank you!

Lastly, I would like to thank my heavenly father. Your plans for me were greater than I could have ever imagined, and you were with me every step of the way. I have received blessing after blessing, and I thank you for holding my past, present, and future in your hands.

## Declaration

---

This thesis is submitted to the University of Warwick in support of my application for the degree of Doctor of Philosophy. It has been composed by myself and has not been submitted in any previous application for any degree.

# Abstract

---

**Background:** There are many challenges in assessing older people in hospital and despite guidelines advocating Comprehensive Geriatric Assessment (CGA), there is a lack of clarity regarding how these patients are currently assessed in practice.

**Objective:** To explore the assessment process on a ward for older people from the perspective of patients and health care professionals.

**Design:** A constructivist Grounded Theory was used to understand assessment from different perspectives.

**Setting and subjects:** Patients without cognitive impairment admitted to and professionals working on one ward for older people in an NHS University Hospital in England, UK.

**Methods:** Data were collected between February 2015 and January 2016, including 37 interviews (15 patients, 22 professionals), a focus group (6 professionals), and 45 hours of fieldwork including observation and review of 18 sets of patient notes.

**Findings:** The core category was 'Navigating', conveyed through three themes: 'Containing complexity', 'Networking', and 'Situating the process'. Key findings were: (1) Navigating assessment is a complex, flexible, context dependent, and social process, (2) Health professionals use a combination of formal, informal, visible and invisible ways of working, (3) Registered nurses are at the centre of networking, spending most their time gathering and sharing information within the multi-disciplinary team, (4) Patients seemed to have a passive role, whilst expressing a variety of decision-making involvement preferences.

**Conclusions:** Navigating the assessment of older people is contextually situated and involves less standardised, less visible and less formalised approaches to assessment than suggested in the guidelines. Awareness of all these aspects of navigating may result in their further utilisation and development. Nurses' focussed on gathering and sharing information, but to move from "chasing" to "coordinating" patient care they need support from the multi-disciplinary team. Patients have limited participation within the navigating process, and their decision-making involvement preferences are not always elicited and facilitated.

## Chapter 1: Introduction

---

*Mr. Smith is 88 years old, has tablet controlled Diabetes Mellitus Type 2, and a history of cardiac failure. He is living independently after his wife passed away five years ago. Up until recently he has been able to manage on his own, but his condition is deteriorating. Due to reduced mobility he had a fall and subsequently he was admitted to an inpatient hospital ward, where he appeared confused and disorientated. Mr. Smith has been diagnosed with a urinary tract infection and dehydration, and is currently treated with fluids and antibiotics intravenously. He has been given a catheter to monitor his urinary output. His blood sugars are monitored regularly by the nursing staff, as he has been started on daily insulin injections. After a couple of days Mr. Smith feels better and his confusion has subsided. When asked by health care professionals he explains his mobility has been deteriorating gradually for a while. He has been restricted in visiting his friends and family, something he enjoyed doing regularly. He used to be able to drive, which gave him opportunities to maintain an active life, but due to the changes in his health he has not driven for several weeks. Mr. Smith has always been an independent man and to lose this independence has a negative influence on his mood. Although the children are very concerned about their father's wellbeing, they seem busy and unable to assist Mr. Smith at home on a regular basis. Mr. Smith is aware that his deterioration might require him to move to a long-term care facility, and the financial aspect of this prospect causes him to worry about his future.*

---

Mr. Smith is not the only one who finds himself in such a situation. The population is ageing and according to the World Health Organisation the global number of people who were 65 years or older in 2010 was estimated at 524 million, and this is expected to rise to 1.5 billion people in 2050 (WHO, 2011). In the United Kingdom (UK) a fifth of the population is 60 years or older (Department of Health, 2001). An ageing population is the reality of today and health care organisations have to meet an increasing demand for care (WHO, 2012a). Despite tremendous effort, Age UK reported that a million older people in England have unmet needs (Mortimer and Green, 2015). This shows how the care of older people requires further attention and development to provide safe and quality care to those who need it.

The National Health Service (NHS) is a care system in the UK providing free care at the point of delivery (NHS Choices 2013a). It is funded through tax paid by the public (Van der

Zee and Kroneman, 2007). Within this care system, the position of the care of older people has been a challenging one (Bridgen, 2001; Denham, 2004). It has been influenced by the general pressures within the NHS related to limited funding and not enough staffing (Dunn, McKenna and Murray, 2016). Additionally, the care of older people as a speciality has struggled with issues such as low status (Brooks, 2009; 2011) and negative attitudes towards older people and their care needs (Ritch, 2012). To this day the care of older people is not perceived as a 'popular' specialism (Maisonneuve, et al., 2014; Baumbusch, et al., 2016), which has been linked to a lack of recognition and poor working conditions in this field (Kydd, Wild and Nelson, 2013). The literature points to the focus on specific diseases rather than on comprehensive care processes within hospital care. This causes challenges regarding the care of older people where needs are often multi-faceted and complex (Baumbusch, et al., 2016), as older people can present with frailty, multi-morbidity and disabilities (Fried, et al., 2001; 2004). Currently 68% of acute hospital beds are filled by older people (Imison, Poteliakhoff and Thompson, 2012), and situations similar to the one in which Mr. Smith finds himself, often occur. Such situations require comprehensive care focusing on a number of aspects, which may be physical, psychological and social. To provide the care that is required professionals should be aware of what each patient needs. An assessment is used to gain this awareness, and this is therefore a crucial aspect in the care of older people.

Warren, a pioneer in the care of hospitalised older people, suggested a multi-disciplinary and comprehensive approach in which older people are carefully assessed and rehabilitated (Warren, 1946). Today international and national guidelines around the care of older people suggest the use of a Comprehensive Geriatric Assessment (CGA), which is advocated as the 'gold standard' (Wieland and Hirth, 2003; Ellis, et al., 2011; NHS England South, 2014). This includes a multi-dimensional, multi-disciplinary, formalised, standardised and structured approach to assessing older people in a variety of care settings, including hospitals (Wieland and Hirth, 2003; Wellens, et al., 2012a).

Although on an international and national level the use of CGAs for older people is supported by guidelines and official statements (Department of Health 2001; NHS England South, 2014), both the literature (Gladman, et al., 2016) and personal experience in the UK suggest it is not always fully incorporated in day-to-day practice. Three key points were found in the literature regarding assessing older people in hospital. These points have

been addressed in depth in the literature review presented in Chapter 2, but can be summarised as: (1) the findings on the effect of CGAs on patient outcomes such as mortality, length of stay and functional status are inconsistent across a number of meta-analyses (Baztán, et al., 2009; Bachman, et al., 2010; Van Craen, et al., 2010; Ellis, et al., 2011; Fox, et al., 2012; Ekdahl, et al., 2015), (2) the literature suggests that the use of CGAs in practice is limited (Challis, et al., 2010; Gladman, et al., 2016) but does not provide insight into current daily assessment practice, and (3) contextual and cultural aspects have historically influenced how hospital care is provided to older people (Bower, 1966; McCormack, et al., 2001; Denham, 2004).

Personal experience in the UK also suggested limited use of CGAs in practice. In 2007 I graduated in the Netherlands, and continued to work there in the acute care setting and in the community. During my first years as a registered nurse in the Netherlands, I gained experiences in assessment processes shaped around some or all of the CGA principles. I felt this was helpful, as practice appeared to result in comprehensive care processes and a certain systematic approach to care that I appreciated at the time. However, working in clinical practice in the UK since 2012 provided numerous examples where the CGA principles were not fully integrated. Nonetheless, care was being given and patients' needs were met.

Combining the literature around assessing older people with personal professional experiences within clinical practice, questions arose. If CGAs are not being used in practice, how is assessment carried out on a ward for older people? When care and treatment is provided, how have professionals found out what was needed in the first place? Although actual practice may not be the 'gold standard', how is current assessment practice in the clinical care setting perceived by those who are involved in it? Does it work for them or does it leave them wanting? In summary, the questions seemed to focus on the discrepancy between the perceived 'gold standard' and actual practice, the lack of clarity around the content of current practice, and how this current practice is perceived by those involved. Therefore, this study aimed:

**To explore the assessment process on a ward for older people from the perspective of patients and professionals.**

A constructivist Grounded Theory (Charmaz, 2014) was undertaken, which is a methodology based on the idea that nothing can be separated from its context (Weber



1904), as this context is constantly under construction by everyone involved (Charmaz, 2014). Additionally, multiple perspectives and truths are valued and can co-exist (Charmaz, 2014). Within this methodology data were collected using qualitative methods, including: (1) observation of patients and health care professionals, (2) interviews with patients and health care professionals, (3) review of medical and nursing notes, and (4) a focus group with professionals. All data were collected on one ward with 42 beds for older people within an NHS University Hospital. The findings were grounded in the data, and are presented in a framework in which one core category and three themes explain the assessment practice taking place on this ward. The chapters of this thesis each focus on specific aspects of the study, and below a brief overview is presented to provide the structure of this thesis.

Chapter 2 provides a review of the literature. It starts with an insight into the complex care needs of older people and the contextual and cultural aspects that influence their care. Then the focus moves to assessment practice specifically, including the development of assessments and the current 'gold standard' of CGAs. The literature regarding the effectiveness of CGAs has been systematically reviewed. Then literature is presented around the perceived value and use of these CGAs in current practice.

Chapter 3 focuses on the philosophical underpinnings and methodology of this study. The choice for using a constructivist Grounded Theory allowed for exploring the assessment process from a number of perspectives held by professionals and patients, appreciating multiple truths. This choice is further elaborated on, as well as the methods used to collect data, including observation, interviews, a document review of medical and nursing notes, and a focus group. Then, the ethical considerations are addressed in this section of the thesis including ethics approval and informed consent procedures.

Chapter 4 presents the findings of the study. In accordance with the methodology used, it presents a conceptual framework in which a core category and three themes explain the process of assessment on a ward for older people. The key social process of assessing hospitalised older people was 'Navigating'. The three main themes within this core category were: (1) 'Containing complexity', (2) 'Networking', and (3) 'Situating the process'. Quotations from the data have been used to explore and explain these in depth.

Chapter 5 is a discussion of the findings of this study in relation to the current body of knowledge. The findings are positioned in the wider literature and from this the original

contributions of this study towards current knowledge are presented. Additionally, the rigour of the study is evaluated in light of its chosen methodology and methods, addressing trustworthiness, authenticity, originality and usefulness of the study, as well as its limitations and strengths.

Chapter 6 is the final chapter of this thesis and focuses on the conclusions and recommendations towards research, clinical practice, education and policy. For each of these fields suggestions have been made based on the findings from this study, in which assessing older people has been presented as a social, complex and flexible navigating process.

## Chapter 2: Literature review

---

In this chapter the literature regarding the care of older people in general and assessing hospitalised older people specifically is addressed. First, older people and their care needs are focused on. Then the contextual and cultural aspects of the care of older people within the NHS in the UK is addressed. Thirdly, the attention moves towards the practice of assessing older people who are admitted to a hospital ward for older people focusing on the effects of the 'gold standard' of CGAs on patient outcomes. Lastly, literature regarding the use and value of these CGAs has been presented.

The process of the literature review can be explained as an evolving journey. The researcher started with a focus on CGAs, due to personal experience with this approach to assessment. The systematic review regarding the effect of CGAs on patient outcomes was undertaken first and was updated throughout the years. Due to the inconclusive findings, which will be presented below, statement in the literature regarding the lack of use of CGAs and as personal experiences of undertaking assessments without all CGA characteristics, additional literature was sought regarding the value and use of CGAs in practice and studies explaining current assessment practice. Due to the choice to undertake a constructivist Grounded Theory, the context and culture of the for older people was addressed as part of the literature review.

Two approaches have been used to search for literature. Regarding the systematic review on the effects of CGAs on patient outcomes, a systematic approach was undertaken. A detailed search strategy has been included in this chapter. This search was done first, and the basic search strategy was broad enough to include studies relevant for other areas of the literature review, such as the sections on the origin and development of assessments and the purpose of CGAs. For each specific topic, such as Person-Centred Care or the history of care for older people, additional literature was found through specific searches in Medline, Cinahl and Web of Science. The focus was on findings key studies, aiming for recent reviews of the literature, well cited studies and studies with strong methodological characteristics. As much as possible the researcher aimed to include literature focusing on the UK or related health care systems. The reference lists of relevant studies were screened for additional literature.

## 2.1 Older people

Worldwide, the expectations are that by the year 2050 one in five people will be 60 years or older (WHO, 2015; 2016b). The Department of Health (2001) pointed out that currently this statement is already true for England as a fifth of its population is 60 years or older. The number of those who are 80 years or older is expected to double between 1993 and 2025 (Department of Health, 2001). Changing family structures result in an increased number of older people living alone, unable to depend on children or other family members for assistance (WHO, 2011). A briefing by Age UK on key numbers regarding older people in the UK mentioned how currently more than a million older people in England have unmet needs (Mortimer and Green, 2015). Funding for social care has reduced significantly over the years, and although funding for the NHS has increased, it has not been enough to deal with the growing demand for the services for the care of older people (Mortimer and Green, 2015).

*'There needs to be realism about what the NHS can achieve with the funding allocated to it for the rest of this parliament ... it is not credible to argue that the NHS can continue to meet increasing demand for services, deliver current standards of care and stay within budget.'* (Dunn, McKenna and Murray, 2016, p.27)

These budget issues will be addressed in more detail later on in this chapter. In this section the focus is on the increasing demand for the care of older people as ageing of the population, both globally and nationally, is an important issue. Its consequences are much discussed among politicians, health care providers and care givers, focusing on providing high quality care when needed, encouraging independence and autonomy in older age, and developing ways to address the challenges of an ageing population (WHO, 2015). These challenges include managing the increasing health care costs due to a larger number of older people living with co-morbidity (Department of Health, 2001; European Parliament, 2006; NHS England South, 2014; WHO, 2011; 2016b). This means there is a need for efficient and low-cost health care services. These challenges also include the need for a larger work force in health care, and more or new facilities to deal with the increasing care needs of older people (WHO, 2012a).

To look more closely at these care needs of older people, the three main and overlapping aspects of ageing will be addressed, as they have been described by Fried, et al. (2004): multi-morbidity, frailty, and disability.

To define the appearance of several chronic conditions in one person the word multi-morbidity or co-morbidity is used. Multi-morbidity involves the occurrence of more than one chronic disease in one person (Van den Akker, et al., 1998), co-morbidity is applicable to those people having an index disease which is under study, and an additional condition that is occurring during the course of that study (Feinstein, 1970). In the United States a database from 1999 including more than 1.2 million of its citizens aged 65 or above, showed that on average they have 2.34 chronic conditions, and the number of these conditions rose in relation to age (Wolff, Starfield and Anderson, 2002). A Dutch study (Van Oostrom, et al., 2012) included data from over seven years with more than two hundred thousand participants. They concluded that between the ages of 65-74, 39% of older people have multiple chronic diseases. This rose to more than 59% for over 74 years. Marengoni, et al. (2011), who reviewed the literature, concluded that between 55-98% of older people suffer from multi-morbidity. When looking specifically at older people admitted to hospital, Clerencia-Sierra, et al. (2015) concluded 99.7% of 924 of the included patients of 65 years and older suffer from multi-morbidity. Their definition of multi-morbidity included diseases, as well as *'geriatric syndromes'* such as immobility, incontinence, constipation, and falls. These syndromes were found to be common amongst the participating patients. Those at higher risk for multi-morbidity were those of an older age, women, and those from low social classes (Marengoni, et al., 2011).

In addition to multi-morbidity many older people suffer from frailty. Although this is an often-used term in clinical practice, the definition is still debated (Topinkova, 2008; Lang, Michel and Zekry, 2009; Abellan van Kan, et al., 2010; Sternberg, et al., 2011; Van Assen, et al., 2016). Clegg, et al. (2013) gave the following definition which seems to explain its broad nature, as well as the potentially wide and far stretching consequences:

*'Frailty develops as a consequence of age-related decline in many physiological systems, which collectively results in vulnerability to sudden health status changes triggered by minor stressor events.'* (p.1)

Initially mainly physical components were defined within the term frailty. Recently a broader description has been adopted to include cognitive, social, and functional aspects (Rockwood, et al., 2005; Topinkova, 2008; Abellan van Kan, et al., 2010; Sternberg, et al., 2011). However, this way of defining frailty requires further study since the relationship between frailty and these different aspects is not entirely clear (Sternberg, et al., 2011).

Fried's criteria for frailty is mainly based on physical aspects of the human body (Fried, et al., 2001). These aspects include unintentional weight loss, self-reported exhaustion, weakness, slow walking speed, and low physical activity. If three of these aspects are present the patient is classified as frail (Fried, et al., 2001). Furthermore, Abellan van Kan, et al. (2010) found evidence that gait speed is the most common way to assess frailty in older people. Topinkova (2008) reviewed 22 articles in which frailty was measured; each used different items to measure frailty. This resulted in a range of 5% to 58% to describe the prevalence of frailty among older people, suggesting wide variation in the way frailty is perceived, defined and measured. Recently Soong, et al. (2015) focused on the prevalence of frailty amongst older people over 65 years old admitted to English hospitals between 2005 and 2013. They showed how the prevalence of frailty amongst these patients has increased over the years, from 12% in 2005 to 14% in 2013. Frailty amongst older people admitted to hospital is therefore a key aspect that requires professionals' close attention (British Geriatrics Society, 2014; Turner and Clegg, 2014).

Disability is another of the three main aspects of ageing mentioned by Fried, et al. (2004). It is defined by the International Classification of Functioning as:

*'An umbrella term for impairments, activity limitations and participation restrictions. Disability is the interaction between individuals with a health condition ... and personal and environmental factors.'* (WHO, 2016a)

Hosseinpour, et al. (2012) reviewed disability using the World Health Survey from 2002-2004, including data from 57 countries. The results show that women suffer from disability more than men. Of men between the ages of 60-64, 21.8% suffer from disability, for women this is 41.9%, increasing to 45.5% of men and 68.9% of women above 84 years of age. Hence, indicating the high prevalence of disability among older people.

Although frailty, multi-morbidity, and disability have been discussed separately they usually interact and overlap (Fried, et al., 2001). Additionally, Fried, et al. (2001) concluded multi-morbidity could lead to frailty, and frailty could cause disability. Changes regarding a person's multi-morbidity, frailty, and disability can influence their health status in different domains, such as physically, psychologically, socially, spiritually, and financially.

## 2.2 Contextual and cultural aspects of the care of older people

### 2.2.1 Introduction to context

Over time, interpretations of what context means have changed from a static view towards notions of fluidity and change (Bate, 2014). It is not something to be measured at a certain point in time or something to be isolated and controlled. It is rather something to observe and integrate, to understand its continuous interaction with the subject under study. Within the essays for the Health Foundation (Bate, et al., 2014) a number of definitions of context are listed, representing its complexity. They include words such as 'surroundings', 'situational', 'interrelated conditions', 'factors', and 'conditions'. Although context remains a complex concept which seems not yet fully understood, the importance of it is more and more recognised within academia (Bate, 2014). McCormack, et al.'s, (2001) definition will be used here:

*'The environment or setting in which people receive health care services.'* (p.96)

This usually includes physical, political, resource, cultural, and technological environments (Bate, Mendel and Robert, 2008). In the following section the context of a ward for older people within the NHS will be outlined.

### 2.2.2 The context of the care of older people in the UK

In this section a number of aspects will be addressed, including the development of the care system and care settings over the years, the evolving role of education, and attitudes of health care professionals towards the care of older people in the UK. In this section the term 'geriatric' may be used in quotations, but otherwise the currently preferred term will be used which is 'the care of older people'.

#### 2.2.2.1 *The development of the care system and the care settings*

The NHS is funded through a national tax system. People pay their taxes to the government, who in turn provides free health care at the point of delivery (Van der Zee and Kroneman, 2007). It was launched in 1948, aiming to provide excellent health care for all (NHS Choices, 2013a; 2013b). Internationally, the NHS ranks as 18<sup>th</sup> on a lists of health care systems, mostly based on its accessibility and equality for everyone (WHO, 2000). Due to a growing older population as discussed earlier, the NHS aims to meet the

needs of older people both in the community, as well as in long term and acute care settings (NHS England South, 2014).

Ignatz Leo Nascher, a physician in New York, suggested the care of older people as a specific branch of medicine (Nascher, 1909; Ritch, 2012), proposing the term 'geriatrics'. In the UK, Marjory Warren has been perceived as a pioneer in the care of older people (Warren, 1946; Ritch 2012; St John and Hogan, 2014). In a time when few people were interested in the care of older people, Warren developed a hospital unit for this group of patients incorporating, for instance, improved hospital environments, rehabilitation, and teamwork (Barton and Mulley, 2002; Denham, 2004; St John and Hogan, 2014). She also implemented a comprehensive assessment approach, which will be mentioned again at a later stage in this review.

Despite Warren's promising approach, the overall state of the care of older people in the UK was less encouraging with it being under-resourced and under-valued (Webster, 1991; Brooks, 2009). The establishment of the NHS in 1948 (NHS Choices, 2013a; 2013b) seemed hopeful as it meant there would be more facilities available for older people, however in practice issues arose (Bridgen, 2001; Denham, 2004). For instance, the NHS Act (1946) stated that hospitals would provide '*constant medical and nursing attention*' to those who needed it, but soon after GPs raised concerns as older people were refused admission to hospitals (Bridgen, 2001). During the 1960s and 1970s a '*virtual freeze on geriatric bed provision*' became the reality within the NHS, which meant an insufficient number of beds were available for older people requiring long-term care (Bridgen, 2001), as:

*'It was feared they would block beds.'* (Barton and Mulley, 2002, p.229)

The focus within the government and the NHS appeared to be on decreasing the '*burden*' of the care of older people within hospitals (Bridgen, 2001). Unfortunately, other possible care options such as community care were not sufficiently funded and supported, and therefore not developed to their full potential (Bridgen, 2001). Furthermore, it was unclear which authority, the government, the NHS, or local authorities, was responsible for which patients (Denham, 2004). This led to patients remaining in hospital, being labelled bed-blockers (Bridgen, 2001).

Despite these difficulties in the history of the care of older people, a number of different units specifically focusing on older people are part of today's health care system. These



units are mostly based on principles introduced by Warren (1948), such as the Acute Care for Elders (ACE) Units and the Geriatric Evaluation and Management Units (GEMUs). These units are built around the presence of specialised professionals, as well as a multi-disciplinary approach, multi-dimensional assessment, and in some cases environmental adjustments such as lounge areas to promote rehabilitation (Warren, 1948; Landefeld, et al., 1995; Amador, Reed and Lehman, 2007; Steele, 2010).

Over the years, the reduction of acute hospital beds in general, including beds for older people, has been continued. The Department of Health (2010) documented a reduction of beds from 181,000 in 1987/1988 to 122,000 in 2009/2010. Despite aims to reduce the number of older people admitted to hospitals, in 2012 it was reported that 68% of the emergency beds in the UK are occupied with older people (Imison, Poteliakhoff and Thompson, 2012). The King's Fund recently concluded:

*'The most visible manifestation of pressures on health and social care budgets is the rapid growth in delayed discharges from hospital.'* (Humphries, et al., 2016, p.4)

Delayed discharges are those patients who are medically ready for discharge, but there is no suitable care available, whether this is long-term care or community services. This puts a strain on the available beds within the care system, which is similar to the problems faced since the start of the NHS in 1948. A systematic review of the literature (Long, et al. 2013) around older hospitalised patients being at risk of adverse events showed how admission to hospital could result in events such as infections, falls, and loss of mobility. This then could result in prolonged hospital stays and complications such as septic shock and fractures (Long, et al. 2013). Therefore, delayed discharges should be avoided for both the patients and the NHS.

Main findings by, for instance, Samra, et al. (2015) and Baumbusch, et al. (2016) were a *'poor fit'* between older people's needs and the organisational structure of hospital care. Hospital care focuses on physical and specific diseases rather than relational care and complex care needs (Baumbusch, et al., 2016), and pressures are high resulting in limited time and staffing (Samra, et al., 2015). These conclusions resonated with the wider literature, for instance regarding the lack of care based on the principles of person-centred care for patients with dementia admitted to hospital (Clissett, et al., 2013), and the need to enhance management of complex chronic diseases within the clinical care of older people (Kane, 2002).

#### *2.2.2.2 Education*

With the large number of older people requiring professional care, education on the care of older people is a relevant contextual aspect. Denham (2004) comments on the slow introduction of the care of older people into university education as a specific field. Brooks (2011) mentions how this was not a compulsory part of nursing training until 1979, and specific lectures on this topic did not start until the late 1970s. Currently it is a mandatory aspect of education and training for health care professionals (Barry, 1994; NMC, 2010). Furthermore, specialist training is available, so professionals can focus their skills to the specific needs of older people (Reed, et al. 2007; Joint Royal Colleges of Physicians Training Board, 2016). Examples for this are physicians becoming geriatricians (Maisonneuve, et al., 2014) and nurses specialising in the care of older people or even a specific area of care of older people such as dementia care (Goldberg, et al. 2016). Also, professional organisations focusing on the care of older people have been founded, such as the British Geriatrics Society (Barton and Mulley, 2002).

#### *2.2.2.3 Attitudes towards the care for older people*

Attitudes towards older people and the care they need can be linked to how ageing has been perceived by society over the years. Ritch (2012) mentioned how old age was still seen as an illness in some medical literature published in the 20<sup>th</sup> century. In the current society youth is perceived as the ideal, for instance seen in commercials promoting anti-wrinkle cream (Kite and Smith-Wagner, 2002). Ageism can be related to this, which has been defined as:

*'Prejudice on grounds of age.'* (Bytheway, 1995, p.9)

The WHO (2015), who mentioned how older people are often stereotyped and seen as weak and frail, pointed out that older people contribute to society in many ways and this should not be under-valued.

A negative view on older people is widely present within health care settings and amongst a variety of professional disciplines (Vize, 2012; WHO, 2015). Historically, the attitudes of professionals towards the care of older people was linked to the low professional status of the care of older people as a specialist field within health care (Denham, 2004). When focusing on nurses' views on older people in history, Brooks (2009; 2011) provides information on nursing older people during the years 1955-1980. Twenty nurses who nursed on a ward for older people during this time were interviewed. The care of older

people is summarised as 'soul-less' (Brooks, 2011, p.232), and the nurses mention how the wards were hidden away and most professionals preferring not to work in this field. Brooks (2011) mentions:

*'The disinterest from educationists of nursing, low staffing levels and limited leadership created an atmosphere of low morale.'* (p.233)

In more recent years, McCann, Clark and Lu (2010) found that amongst third year nursing students the care of older people was the least popular specialty, as they preferred acute care and mental health. This was linked to the curriculum not promoting the care of older people to the students. In a qualitative study conducting six focus groups with nurses working in a variety of specialisms such as emergency medicine, the care of older people and palliative care, Baumbusch, et al. (2016) found that the field of care for older people continues to suffer from a low status compared to, for instance, trauma care. They linked this to the perceived slower pace of working with older people, the need to provide personal care to patients, and the perceived lack of recognition within the hospital environment (Baumbusch, et al., 2016). Kydd, Wild and Nelson (2013), who conducted a survey amongst 376 nurses in Scotland from primary and secondary care not necessarily specific to the care of older people, also found this aspect of lack of recognition. Additionally, they mentioned working conditions and working environment as negatively impacting recruitment into the care of older people. These attitudes were similar between 1999 and 2009 and show a concerning lack of improvement in the perceived status of the care of older people over the years.

These nurses' attitudes towards the care of older people were shared by other disciplines such as physicians (Bridgen, 2001; Ritch, 2012). Maisonneuve, et al. (2014) conducted a survey amongst medical graduates in the UK between 1974 and 2009 to review which percentage of graduates continued in the care of older people. With response rates around 66% they found that 0.9% of graduates aimed for a career in the care of older people one year after qualification, increasing to 1.5% after five years. In comparison, more than 2.4% of medical graduates in the UK chose a career in cardiology (Smith, et al., 2013). In a recent UK based qualitative study (Samra, et al., 2015) junior and senior doctors from a variety of specialisms, were interviewed about their attitude towards the older people in their care. One of their main findings was that negative attitudes or emotions were linked to contextual and organisational aspects, as participants felt they

were unable to provide high quality care to older people due to pressures such as limited time and low staffing levels (Samra, et al., 2015). In summary, the current attitudes of professionals from different fields and specialities towards the care of older people continue to show how this field of care struggles with its image (Liu, et al. 2012; Liu, Norman and While, 2013; Baumbusch, et al., 2016).

The studies mentioned above, apart from the study by Brooks (2009; 2011) on nursing between 1955 and 1980, included professionals from a number of fields and specialities, not necessary focusing specifically on those working in the care of older people. Therefore, specific attention was given to literature regarding attitudes of health care professionals working in care for older people towards their patients.

Liu, Norman and While (2013) reviewed the literature on whether working in a particular work setting associated with positive or negative attitudes to older people. They included 25 low and moderate quality survey studies in which student nurses and nurses from a variety of care settings such as hospitals, rehabilitation centres and nursing homes took part. They looked for associations between attitudes towards older people and a number of variables such as education level, marital status, experiences with older people, and working in certain care settings. Though most findings were inconsistent across the included studies, they did find that knowledge about ageing and a preference to work with older people was associated with a positive attitude towards the care of older people (Liu, Norman and While, 2013). Similarly, Samra, et al. (2015) found that negative attitudes amongst doctors were mostly found by less experienced doctors and those who did not specialise in this field. Therefore, in hospital care in general, care of older people may be met with negative attitudes from a number of professionals from various specialities. However, when concentrating on those choosing to work in this field a more positive attitude towards older people seems to be suggested. This was supported by the findings of a qualitative study in long term nursing home care, where professionals expressed appreciation for their work and for the relationships they were able to develop with those in their care (Eldh, et al., 2015). However, further research seems needed to explore views on the care of older people by those working in this speciality within the acute care setting as evidence appears to be limited.

#### 2.2.2.4 Summary

This section on the development of the care of older people in the UK noted several negativities such as low status, negative attitudes, and financial difficulties. To summarise the development of the care of older people in the UK, Bridgen (2001) made the following statement:

*'The neglect and low professional status of geriatrics inhibited the development of a modern geriatric service.'* (p.520)

Nonetheless, the care of older people has evolved significantly since the start of the NHS in 1948. However, further improvement is needed to enhance the knowledge and attitudes of professionals towards this field of care and this group of patients, and to meet the specific multi-dimensional and complex needs of the older generation (WHO, 2015). In the following section, this will be further explored in relation to cultural aspects of care, including person-centred care, shared decision making, and barriers regarding their implementation in practice.

#### 2.2.3 Introduction to culture

This section concentrates on the cultural aspects of the care of older people. Definitions of culture have been summarized by Spencer-Oatey (2012), identifying three aspects within culture: observable artefacts, values, and basic underlying assumptions. She also wrote about culture on individual and group level, stating culture is a *'fuzzy concept'* (Spencer-Oatey, 2012, p.9). In this thesis Bower's (1966) definition of culture was used as it enabled a focus towards ways of working within the context of the care of older people:

*'The way we do things around here.'* (p.41)

In this thesis, *'around here'* is equivalent to a ward for older people, therefore narrowing the concept of culture towards the research setting. When following McCormack, et al. (2001), who acknowledged the possibility of several cultures being present within one context, this could be explained for the research setting as, for instance, the broad NHS culture, a more specific hospital culture, a ward culture, a nursing culture, and a medical culture. Within each culture different professionals can play different roles.

Wolcott (2008) identified three different viewpoints on culture: (1) those who believe culture is one of the main concepts influencing people and their actions, (2) those who believe culture is something that only exists because we believe it does, and (3) those who

do not believe it exists. On the one hand culture is often described as including values and beliefs (McCormack, et al., 2001; Spencer-Oatey, 2012), and on the other hand a culture influences values and beliefs (Kroeber and Kluckhohn, 1952). Despite these ongoing debates on the origin and existence of culture, in this thesis which was based in the constructivist paradigm, culture was believed to be an influential concept within the care of older people. Within this paradigm, context, including culture, is part of the constructed reality, and the phenomenon under study cannot be seen separately from it (see Chapter 3). Especially as the phenomenon under study is current assessment practice on a ward for older people, and culture having been defined as how things are done. Both therefore focus on current practice and are closely interlinked.

#### 2.2.4 Cultural aspects of inpatient care of older people

In the UK the framework for the care of older people (Department of Health, 2001) advocates the use of Person Centred Care (PCC) principles in every day practice. These principles are also highlighted in a more recent publication by the NHS (NHS England South, 2014). Both documents mention the importance of treating older people with respect and dignity, aiming for them to make decisions about their health and care in a Shared Decision Making (SDM) process (Department of Health, 2001; NHS England South, 2014). Additionally, collaboration between health care professionals within the care of older people is encouraged due to their complex care needs (Department of Health, 2001; NHS England South, 2014). Therefore, these cultural aspects of care are included in this section.

##### 2.2.4.1 *Person-Centred Care*

One of the main aspects of the care of older people within the NHS is PCC, which can be seen as the basis of all care activities (Department of Health, 2001; NHS England South, 2014). The concept of PCC is built on the key principles of respect and autonomy (McCormack, 2003). These can be related to the philosopher Kant (1785), who mentioned the equal value and worth of individual people. The psychologist Rogers (1980) argued not to reduce people to their difficulties and instead enhance their autonomy. He suggested the therapist should aim to create a relationship with the patient in which the patient would feel valued, and where the perceived experiences of the patient are the main focus. Two main historic changes have been linked to PCC's emergence in health care, which are the growing focus on subjective patient experiences, and the empowerment of patients regarding making decisions on their health and care (Leplege,

et al., 2007). These changes differ to a historically paternalistic approach to care, where professionals made treatment and care decisions in the best interest of the patient without the input of this patient (Gallagher, 1998).

PCC is an evolving concept, still heavily discussed and debated amongst those involved in health care (Australian Commission on Safety and Quality in Health Care, 2010; McCormack, et al., 2010). A large number of definitions, core elements, and closely related terms of PCC (Dow, et al., 2006; Leplege, et al., 2007; Australian Commission on Safety and Quality in Health Care, 2010) show a remaining need for clarity regarding this concept and its place in practice (McCormack, 2004; McCance, McCormack and Dewing, 2011). In this thesis the following definition will be used, which is based on the work by the philosopher Mounier (1952):

*‘Person-centred care highlights the importance of knowing the person behind the patient – as a human being with reason, will, feelings, and needs- in order to engage the person as an active partner in his/her care and treatment.’* (Ekman, et al., 2011, p.249)

This definition suggests the need for a good patient-professional relationship built on trust, respect, and recognition (Kitwood, 1997). This idea has been emphasised by registration bodies of health care professionals such as the General Medical Council (GMC, 2014) and the Nursing and Midwifery Council (NMC, 2015), who have also mentioned the need for equality between patients and professionals, and the patients’ right to be involved in decision making regarding their care and treatment.

The growing interest in PCC is visible in the range of contributions to its development. Authors such as Kitwood (1997) and Dewing (2008) have addressed PCC related to care for people with dementia, stressing the need to acknowledge individual person’s values. McCormack has published a PCC framework (McCormack 2003; 2004; McCormack and McCance, 2006; McCormack, et al., 2010) in which five aspects are mentioned, including working with patient’s beliefs and values, engagement, SDM, sympathetic presence, and provision for physical needs. With this, professionals should aim for satisfaction and involvement in care, a feeling of well-being and the existence of therapeutic culture (McCormack and McCane, 2006). In Sweden the University of Gothenburg Centre for Person-Centered Care has been established to focus on PCC and long-term illness (Ekman, et al., 2011), presenting three routines of care to enhance its use in daily practice: initiating, working, and safeguarding the partnership.

Debates about its conceptual underpinnings and its place within practice continue (McCance, McCormack and Dewing, 2011). Some suggest the focus towards Evidence Based Practice (EBP) (EBM Working Group, 1992; Sackett, Rosenberg and Gray, 1996; Sackett, et al., 2000) or research evidence as the basis for all care and treatment decisions is standing in the way of PCC (Barratt, 2008; Dewing, 2008). This friction is explained in professionals wanting to follow evidence based guidelines, which could silence patient values and preferences, leaving little room for a shared decision (Dijkers, Murphy and Krellman, 2012; Greenhalgh, Howick and Maskrey, 2014). However, one could argue that this kind of EBP is just the use of evidence into practice, and not an example of practice that incorporates the full concept of EBP, which encompasses research evidence, a patient's clinical state and their circumstances and preferences, clinical expertise, and health care resources (Dicenso, Ciliska and Guyatt, 2005). Therefore, EBP and SDM are compatible if both are used to their full potential.

When turning to the effects of PCC, a diverse body of literature can be found. There are a number of positive outcomes, such as a reduced length of stay (LOS) of one day and better levels of activities of daily living (ADL) for the intervention group in comparison to a control group (Ekman, et al., 2012), or increased self-efficacy amongst patients with acute coronary syndrome (Pirhonen, et al., 2017). A systematic review on the efficacy of PCC included eleven controlled trials (Olsson, et al., 2013). Eight of the eleven studies reported significantly improved results for, for instance, mortality and costs. Some outcome measures were self-rated and subjective such as quality of care. Others were more objective such as the Body Mass Index and LOS. In their discussion, the authors point towards heterogeneity regarding contexts, outcome measures, and the content of the intervention itself (Olsson, et al., 2013), making comparison of the studies' findings difficult.

Although PCC seems a valuable concept for the care of older people, it remains challenging in practice (Dewing, 2008; McCormack, et al., 2010; Ekman, et al., 2011). These challenges include, for instance, time pressures leading to prioritisation of medical aspects of care, professionals being used to a disease-centred approach to care, and professionals' misunderstanding the concept of PCC and its implications for their clinical practice (McCance, McCormack and Dewing, 2011; Ekman, et al., 2011). Barriers towards the use of PCC were summarized by Dow, et al. (2006) mentioning lack of time, lack of



professional autonomy, and the organisation restrictions as perceived by professionals. The need for additional research regarding the use and implementation of PCC in practice, as well as the effects of PCC exists (Dow, et al., 2006; Ekman, et al., 2011; Olsson, et al., 2013; Pirhonen, et al., 2017), to enhance its integration in every day care practice.

#### *2.2.4.2 Shared Decision Making*

A key aspect of PCC is SDM (McCormack, et al., 2010; Ekman, et al., 2011). This involves the relationship between patients and professionals, and the way decisions regarding the patient's health, treatment, and care are made. With a large part of the care of older people being concerned with managing long term illnesses such as Diabetes Mellitus, Parkinson's disease, and arthritis, Friesen-Storms, et al. (2014) discussed SDM in relation to chronic care. Their definition will be used in this thesis:

*'Shared decision making is a process that aims to have the health care professional and the patient jointly arrive at a health care choice that is based on the best available research evidence, clinical expertise, and the values of the informed patient.'* (Friesen-Storms, et al., 2014, p.395)

The aim is to include patients in the decision making process regarding their care and treatment as much as possible, to enhance self-management and autonomy (Clark, et al., 2009; Edwards and Elwyn, 2009a).

There is an ongoing debate about what SDM is or should be, and whether and how it should be used in practice (Edwards and Elwyn, 2009b). This debate includes whether SDM should result in equality between the professionals and the patient in the process of decision making regarding the patient's care and treatment, or whether it also includes an equally shared decision, which means they need to agree with one another (Clayman and Makoul, 2009).

Although SDM is advocated in national guidelines (Department of Health, 2001; NHS England South, 2014), not every patient wants to or is able to have equal input regarding their health decisions, and not every health care professional is open to or able to facilitate equal input from their patients (Clark, et al., 2009; Edwards and Elwyn, 2009b; Friesen-Storms, et al., 2014; Joseph-Williams, Elwyn and Edwards, 2013). Several studies (Scheibler, et al., 2005; Spies, et al., 2006; Briel, et al., 2007; Deber, et al., 2007) showed how older people are less willing to participate in decision making than younger people.

In addition, it was found how a higher level of education was linked to a patient's wish to be involved in SDM, whereas people with a lower education level seemed to prefer a more passive patient role (Friesen-Storms, et al., 2014). The 'ideal degree' of SDM in practice is therefore depending on the people involved, and if older people prefer not to be involved in SDM this is a choice in itself and it should be respected by Health Care Professionals (HCPs). Another element that influences the use and degree of SDM is the nature of the decision that has to be made. If for instance a decision is based on good quality research suggesting one option which presents no side effects, is cheap, and has limited impact on lifestyle, the degree of SDM may be lower than when there are several options available with variable side effects, high costs, and a significant impact on a person's lifestyle (Friesen-Storms, et al., 2014).

To incorporate SDM in practice, professionals need to have good communication skills and sufficient time to discuss care and treatment options and their pros and cons. They need to be able to listen to the patient's experiences and preferences, check the patient's understanding of what is being discussed and clarify if needed (Makoul and Clayman, 2006; Stacey, Légaré and Kryworuchko, 2009). Barriers of SDM that were experienced by professionals included time constraints, lack of resources, lack of agreement with the concept and how it should be used, and lack of awareness (Légaré, et al., 2008). Additionally, characteristics of professionals can be barriers to the use of SDM in practice, such as lack of motivation or willingness to change one's practice towards a more equal partnership with patients (Légaré, et al., 2008).

In summary, SDM remains a debated topic within the care of older people. There are a number of perceived barriers regarding its use, such as professionals' and patients' characteristics and resource limitations. Therefore, the use of SDM within the care of older people continues to be challenging.

#### *2.2.4.3 Teamwork*

Teamwork has been promoted by early physicians in the care of older people (Warren, 1946; Royal College of Physicians of London, 1977; Denham, 2004), and it continues to be considered an important aspect in more recent documents. For instance, the National Service Framework for Older People (Department of Health, 2001) and a guideline regarding integrated care of older people (NHS England South, 2014) addressed the importance of multi-disciplinary teamwork. This term seems to include different

professionals working together to provide patient care. Registration organisations, such as GMC (2014) and NMC (2015), also note the need for professionals to be competent in teamwork and communication. In addition, assessment practice and CGAs are linked to a multi-professional team approach (Department of Health, 2001; Wieland and Hirth, 2003; NHS England South 2014). The extent to which this should happen and how it should take place is not further explained.

Similar to PCC and SDM, teamwork is a complex aspect of care and continually develops over time, resulting in an evolving and expanding terminology (McCallin, 2001). Sorrells-Jones (1997) made the following distinction between multi- and interdisciplinary teamwork:

*'Multidisciplinary refers to a team or collaborative process where members of different disciplines assess or treat patients independently and then share information with each other... Interdisciplinary described a deeper level of collaboration in which processes such as evaluation or development of a plan is done jointly, with professionals of different disciplines pooling their knowledge in an independent manner.'* (p.26)

Other publications hold different definitions and some use slightly different terminology such as *'interprofessional'* (Reeves, et al., 2010) or *'multiprofessional'* (Payne, 2000). In this section the term teamwork is used to include all different types and degrees of collaboration between professionals.

Salas, Sims and Burke (2005) suggested teamwork in any setting includes five main components, which were leadership, mutual performance monitoring, backup behaviour in which professionals are aware of one another's responsibilities, adaptability, and team orientation. These main components incorporated three mechanisms, which were shared mental modes, closed loop communication in which received information is acknowledged, and mutual trust (Salas, Sims and Burke, 2005). In more recent years, the complexity of current teamwork specifically in health care environment has been reflected in a framework (Harris, et al., 2013; Hewitt, Sims and Harris, 2014; 2015; Sims, Hewitt and Harris, 2015a; 2015b). A realist synthesis of the literature was conducted, including 109 studies initially and an additional nineteen studies when conducting focused searches to find further evidence. This resulted in thirteen mechanisms representing the complexity of interdisciplinary teamwork (Harris, et al., 2013). Examples of mechanisms are *'Shared sense of purpose'*, *'Collaboration and coordination'*, *'Efficient, open and*

*equitable communication*', and *'Team behavioural norms'* (Harris, et al., 2013, p.31-32). The mechanisms show overlap with the components found by Salas, Sims and Burke (2005), such as the importance of trust and common aims and expectations.

Several historical and current movements have affected teamwork in health care settings and the way professionals collaborate within hospital care. Reeves, et al. (2010) and Payne (2000) noted the military influences, such as hierarchy, that were incorporated into health care. More current developments include the move towards PCC, the increase of chronic diseases, an ageing population, the specialisation of professions, and the developments in Information Technology (Reeves, et al., 2010). These changes influenced the way professionals work together to provide patient care. For instance, hierarchy and specialisation of care resulted in more professionals being involved with patient care, increasing a need for frequent communication between these professionals.

Despite changes in the way teams collaborate, the complexity of the process of teamwork, in general it is seen as 'something good'. It is believed to reduce costs, promote coordination of care, reduce length of stay, enhance communication, increase satisfaction, reduce duplication of care, and enhance patient outcomes (McCallin, 2001; Clements, Dault and Priest, 2007; Zwarenstein, Goldmand and Reeves, 2009; Reeves, et al., 2010; Lewin and Reeves, 2011). However, a review regarding inter-professional collaboration interventions on hospital wards by Zwarenstein, Goldmand and Reeves (2009) included five studies, showing the paucity of research in this area. In addition, similar to studying the effects of PCC on patient outcomes, the heterogeneity between study designs, interventions, and target groups affected the ability to compare the included studies. Similarly, Harris, et al. (2013) noted how certain aspects of their framework regarding interdisciplinary teamwork were based on limited evidence and a small number of studies. Therefore, additional research to strengthen statements regarding effectiveness of teamwork, and effectiveness of specific aspects of teamwork is needed (Zwarenstein, Goldman and Reeves, 2009; Reeves, et al., 2010; Harris, et al., 2013; Körner, et al., 2016).

Despite the benefits, or potential benefits of effective teamwork, there are barriers to implementing this within health care settings. These barriers include heavy workloads, rapid turnover of staff, limited education, organisational elements, a large number of professionals being involved in patient care, different aims and objectives, and lack of

leadership (McCallin, 2001; Xyrichis and Lowton, 2008; Lewin and Reeves, 2011). These barriers emphasize the complex process of collaboration, and point to the everyday challenge faced by professionals who work within a multi-disciplinary team.

Within teamwork both leadership and communication are essential (McCormack, et al., 2001; Lewin and Reeves, 2011) and both are addressed separately below.

### 1. Communication

A basic definition of communication describes it as the exchange of information between the person who sends it and the one who receives it (Salas, et al., 2008). However, communication is usually not as straight forward as this definition may suggest. Communication within health care settings seems to happen in both a formal and a less formal way (Coiera, et al., 2002; Lewin and Reeves, 2011; Bellury, et al., 2016). Lewin and Reeves (2011) conducted an ethnographic study using interviews and observations in three three-month periods over two years on a medical ward. They found that throughout the day both ad-hoc and planned communication took place at different areas on the ward, including different professionals at different times and covering a number of topics from patient care to private lives. Most communication on the ward appeared to be ad-hoc in nature, which meant it was short and unstructured, taking place in, for instance, corridors and nurses' stations (Lewin and Reeves, 2011). This was similar to the findings by Coiera, et al. (2002) who found that 90% of communication in emergency departments is ad-hoc and informal rather than planned and formal.

Hickman, et al. (2015) reviewed the literature regarding team based interventions in care for older people, including seven RCTs, and one of their conclusions was regarding the importance of improving communication to enhance care. This points to the key role of communication within the field of care for older people. However, the precise effects of communication are less clear. Martin, et al. (2010) reviewed the literature regarding the effectiveness of inter-professional communication on outcomes such as mortality, use of care services, quality of life, and clinical, functional and social outcome measures. The fourteen included RCTs presented at least one positive outcome per study, but due to inconsistent results across the included literature, the findings were inconclusive (Martin, et al., 2010). The authors of both reviews (Martin, et al., 2010; Hickman, et al., 2015) pointed to the heterogeneity of the interventions under study, and the difficulty to assess the processes involved.

Challenges towards effective communication within health care settings were found in, for instance, inter-professional communication such as communication between nurses and physicians. Practical difficulties were found in nurses not attending ward rounds due to a heavy workload, and doctors' scarcely initiating contact with nurses to update them on the patients' medical plans (Lewin and Reeves, 2011). A questionnaire study was conducted in two large hospitals in Greece including 93 physicians and 197 nurses (Matziou, et al., 2014). They showed how physicians and nurses have different views on the effectiveness of their communication and their perceived lack of understanding of one another's roles seems to negatively influence this. For instance, 49.8% of the nurses felt physicians did not have a fair view of nursing work, and 60.4% felt a lack of physicians listening to and accepting nurses' opinions. A total of 95% of physicians, however, felt they respected nurses' opinions, and 98.8% felt they cooperated with nurses within patient care (Matziou, et al., 2014). This showed a discrepancy between physicians' and nurses' views on their communication, and can be linked to the previously mentioned framework around team collaboration (Harris, et al., 2013) which included the importance of understanding one another's roles.

Therefore, questions remain about communication and how to make it more effective to enhance teamwork within health care settings. Certain tools have been developed and implemented to standardise communication, such as the SBAR, which stands for Situation-Background-Assessment-Recommendation. This provides a template for when professionals are communicating regarding patient care. The literature presents a number of evaluations of this tool, for instance studies conducted by De Meester, et al. (2013) and Randmaa, et al. (2014). In a prospective intervention study by Randmaa, et al. (2014) this tool has been found to reduce incidents caused by poor communication. Furthermore, De Meester, et al. (2013) evaluated the use of SBAR by sixteen nurses and physicians who were stationed on these wards. They reviewed patient records and conducted a questionnaire. They found that professionals felt communication between physicians and nurses was more effective, a reduction in unexpected deaths, and an increased number of unplanned admissions to Intensive Care Units (De Meester, et al., 2013). Therefore, the use of this tool in which communication about patients is standardised around four main aspects, seems to enhance communication between health care professionals.

Although communication is crucial within teamwork, it is also challenging within an environment in which different professional disciplines work together, and where both formal and less formal ways of communicating are used. Further research is needed to gain a deeper understanding into communication in health care (Martin, et al., 2010), for instance in relation to the content and use of ad-hoc communication in daily practice. It seems that qualitative designs are most suitable to provide further insight, as observation and interviews with those who are involved in the communication processes may provide valuable perspectives.

## 2. Leadership

There are many styles of leadership (Northouse, 2016) and it is an often debated topic outside and within health care. Within health care there can be more than one leader. For instance, consultants lead medical care, ward managers lead ward based teams, and nurse practitioners lead specialised nursing care. Hierarchy within health care has been mentioned before and is also relevant in relation to leadership as directors, modern matrons, physicians, ward managers, nurses, physiotherapists and many others lead on different levels. Leadership should therefore be broadly defined to include all these levels of leadership:

*‘A process whereby an individual influences a group of individuals to achieve a common goal.’ (Northouse, 2016, p.6)*

Several features of the NHS system create a challenging environment for developing leadership. Its continuous change, hierarchical set up, and financial and resource issues require creative and flexible leadership. Several studies have shown a link between leadership and job satisfaction, including nurses’ intention to stay in their current position (Cowden, Cummings and Profetto-McGrath, 2011; Negussie and Demissie, 2013;) and the aims of leadership are to create a positive encouraging environment and to improve staff morale (Limb, 2012; NHS Leadership Academy, 2014). However, the Royal College of Nursing (RCN, 2014) found that the current low morale amongst health care workers gives reasons for concern.

The leadership style within the NHS is often presented as being or aiming towards the transformational style (Alimo-Metcalfe and Alban-Metcalfe, 2005; Lawrence and Richardson, 2012). A transformational leader wants to encourage, motivate and enable people to accomplish more than is expected of them (Northouse, 2016). In 2005

leadership within the NHS was the subject of a Grounded Theory study aiming to find the main factors of leadership through the eyes of chief executives, and top, senior, and middle managers from NHS Trusts and government organisations in England and Wales (Alimo-Metcalfe and Alban-Metcalfe, 2005). They found six factors were part of leadership, which were to value others, network and achieve, enable and develop potential, show integrity, be accessible, and be decisive. The government published a document with expectations regarding national and regional leadership within the NHS (Department of Health, 2009). Its broad expectations and suggestions are translated into a more individual approach in a competency framework (NHS Leadership Academy, 2011) and a leadership model (NHS Leadership Academy, 2014). The framework lists a number of personal qualities as well as actions for working with others, improving the service, and setting the direction that they feel should be present. The leadership model presents nine dimensions of behaviour that leaders within the NHS should aim for, for instance, caring, engaging, connecting, developing, and inspiring (NHS Leadership Academy, 2014). In addition, the importance of personal qualities as self-awareness and self-confidence are highlighted (NHS Leadership Academy, 2014).

The idea that the NHS focuses mainly on transformational leadership could be questioned. Firstly, whereas charisma is often mentioned as a key aspects of a transformational leader (Northouse, 2016), Alimo-Metcalfe and Alban-Metcalfe (2005) found that amongst the leaders in the NHS not charisma but the ability to care for others appeared most important. Secondly, the NHS seems to place high value on personal characteristics and developed abilities (NHS Leadership Academy, 2014), which are key aspects of trait and skills leadership (Northouse, 2016). Additionally, Lawrence and Richardson (2012) conducted interviews with nine modern matrons about their leadership style and the matrons often mentioned the need to adapt their style according to certain situations, which is also similar to the situational approach (Northouse, 2016). These findings could be used to argue that transformational leadership is not the predominant style used within the NHS. The model of leadership in the NHS (NHS Leadership Academy, 2014) seems to incorporate aspects of different styles and it does not necessarily focus primarily on the characteristics of the transformational approach.



### 2.2.5 Summary

With the aim of this thesis focusing on exploring professionals' and patients' perceptions of the assessment process, the context is taken into account when studying this topic. This is in line with the constructivist philosophical underpinning of this study, which will be addressed in the next chapter.

The context of the care of older people within the NHS was explained from the foundation of the NHS in 1948. The increasing number of older people, the development of services for the care of older people, as well as the attitudes towards older people have been addressed. This showed how the care of older people is perceived as having a lower status than, for instance, trauma and cardiology, and further development is needed to meet the complex and multi-dimensional needs of older people.

Culture was highlighted specifically in this section, as it was defined around current practice and how things are done in practice. This was related to the aim of this study focusing on exploring current assessment practice. PCC, SDM, and teamwork were included in this section. They are interrelated, as SDM stands within the PCC approach, and teamwork is needed within both PCC and SDM to enhance their successful use in practice. These complex aspects of care remain under development as their implementation and use present challenges in practice, such as time pressures resulting in prioritisation of medical issues, care focusing on individual diseases rather than on multi-morbidity, and the need for a better understanding of certain features of these complex aspects of care. These features include, for instance, the content and use of informal communication, and how to enhance collaboration and communication within multidisciplinary teamwork.

## 2.3 Assessing the needs of older people in hospital

This section will move away from the general focus on context and culture of the care of older people, towards the assessment of care needs of those admitted to a ward for older people. First, an overview will be given of the development of assessments for older people, pointing to the 'gold standard' of CGAs, with the effectiveness of these CGAs having been examined in a systematic review. Then the literature on current assessment practice in day-to-day care will be presented.

### 2.3.1 The origin and development of assessment of older people

This thesis focuses on assessing older people. Thus far a broad overview has been given of the care of older people in which these assessments take place. However, from here the assessment process of older people will be the main focus. The Nursing and Midwifery Council (NMC) in the UK sets the competencies a nurse should have to be able to register, and the UK's General Medical Council (GMC) is an organisation that registers medical doctors and sets guidelines for their competencies and education. Both bodies identify assessment as a core competency for practice:

*'All nurses must carry out comprehensive, systematic nursing assessments that take account of relevant physical, social, cultural, psychological, spiritual, genetic and environmental factors, in partnership with service users and others through interaction, observation and measurement.'* (NMC, 2014, p.8)

*'Interpret findings from the history, physical examination and mental-state examination, appreciating the importance of clinical, psychological, spiritual, religious, social and cultural factors.'* (GMC, 2009)

All of this suggests the use of assessments as part of required practice and competencies of all health care professionals; however, the depth nor the exact content of the assessments is further explained. Nonetheless, assessment is explained as the process around gaining and interpreting comprehensive knowledge of the patient to provide care accordingly.

Some define assessment to be gathering of information about the patient only (American Nursing Association, 2016). The RCN (2004), although initially defining assessment as gathering of information only, also pointed to the importance of using this information to take appropriate action. When turning to the literature on assessing older people, using a comprehensive and multi-disciplinary approach, it includes the process from information gathering to undertaking interventions (Wieland and Hirth, 2003; Ellis, et al., 2011). Assessment was defined by a medical dictionary as:

*'The evaluation of a person ... during which time information is collected to identify the patient's needs and formulate a treatment plan.'* (Segen's Dictionary, 2012)

This definition moves beyond the gathering of information, towards using this information to formulate a plan of care. Within the care delivery process, which includes all care provision, assessment can be seen at the heart of the process where it focuses specifically on working with knowledge about the patient. In other words, in assessment professionals gain knowledge about the patient and their needs and take actions to meet these needs. Therefore, this thesis focuses specifically on the process of and views on how information about patients is gained by professionals and how this information is used within the multi-disciplinary team to meet patients' needs.

In this section, the origin and development of assessments for older people will be addressed. The rationale for standardising these assessments was linked to the need to enhance communication between health care professionals by using 'one language', with the intention of enhancing management of the care of older people (Luk, Or and Woo, 2000; Gray, et al., 2009; Wellens, et al., 2011a). Assessments can be divided into first, second and third generation assessments. These three generations differ in focus, content, and evidence base. The distinction between different generation assessments has been described by, for instance, Bernabei, et al. (2008), Gray, et al. (2009), and Wellens, et al. (2011a). They explained that first generation assessments focus on one domain. These assessments were used in single settings, and each first generation assessment was individually validated for use. Second generation assessments use a comprehensive approach, including multiple domains and linking these together. They have been tested in practice for reliability and validity, and are used in single settings only, from acute to chronic based care. The third generation assessments use the same multi-dimensional standardised assessments in multiple settings to enhance communication between these settings. The changes that were made regarding assessments aimed to shift the focus from care planning based on the perspective of the health professional, towards care planning based on the preferences and needs of individual patients (Gray, et al., 2009).

A pioneer in the care of older people is Dr. Marjory Warren, who promoted multi-disciplinary assessment of older people (Warren, 1946). In the 1930s she aimed to rehabilitate older people admitted to hospitals by suggesting a multi-dimensional and multi-disciplinary approach aiming to comprehensively enhance patients' health status (Warren, 1946; Rubenstein, Abrass and Kane, 1981; Matthews, 1984; Luk, Or and Woo,

2000; St John and Hogan, 2014). Over time these ideas have been further developed. In the literature, assessments for older people addressing more than one domain are often described with the term Comprehensive Geriatric Assessments (CGA), and the most used definition is by Wieland and Hirth (2003), who adjusted a previous one by Rubenstein et al. (1991) to:

*“A CGA is a multidimensional interdisciplinary diagnostic process focused on determining a frail older person’s medical, psychological and functional capability in order to develop a coordinated and integrated plan for treatment and long-term follow-up.”* (Wieland and Hirth, 2003, p.454)

This last definition is currently mostly used, although it is often referenced to Rubenstein (Ellis, et al., 2011). Two characteristics which have been added by Wieland and Hirth (2003) leave room for interpretation, multi-dimensional and interdisciplinary. The definition mentions the multi-dimensional inclusion of the medical, psychological, and functional domains, but not the social, spiritual, or financial domains. These additional dimensions are incorporated into well-developed assessments such as interRAI, which stands for inter Resident Assessment Instrument (Carpenter, et al., 2001; Gray, et al., 2008; Wellens, et al., 2011b; 2012a) and EasyCare (Richardson, 2013; Chadborn, et al., 2015). However, these dimensions are not included in the majority of other CGAs mentioned in the literature. The definition also does not address the necessary depth of the content of the domains for an assessment to be defined as a CGA. Regarding the interdisciplinary aspect Pilotto, et al. (2007) added the word ‘usually’ to the definition. A large amount of literature shows it is a nurse, a physiotherapist, or a social worker who carries out the CGA individually, and this seems to show how a multi-disciplinary approach is not always incorporated in practice (Challis et al., 2010).

First generation assessments do not qualify as CGAs by themselves, since they address one dimension. However, there are examples in which a combination of several first generation assessments are used, and the aim to address several dimensions is met by this strategy. Therefore, this kind of assessment can add up to a CGA. The second and third generation assessments qualify as CGAs, since they are multi-dimensional.

International organisations have addressed the need to assess and understand the complex needs of an ageing population as a whole, as well as their individual needs when requiring professional care. In 2002 the WHO started a program called ‘active ageing’ and

their main aim was and continues to be enhancing autonomy and independence for older people in regard to physical, social and mental wellbeing, and to provide care to older people when needed (WHO, 2002; 2015). The aim for person-centred and integrated care, which links to the definition of CGA as presented above, was repeated by the WHO recently (WHO, 2016b). Comprehensive assessment is one of the recommendations made by the WHO (2015) to enhance quality of life, independence and health for older people in all aspects of life. The EU identified the need to focus on “methods for health promotion and prevention”, including both healthy ageing and the development of diagnostic tools (European Parliament, 2006), which is similar to the aims of CGA. Therefore, a CGA is currently perceived as the ‘gold standard’ within assessing older people (Ellis, et al., 2011; Fox, et al., 2012; 2013). It can be used by professionals to assess care needs in older people, in community, acute, or subacute settings (Wellens, et al., 2011b; 2012a). On a national level in the UK, the use of CGAs in hospitals has been recommended in a number of frameworks focussing on the care of older people (Department of Health, 2001; Vize, 2012; NHS England South, 2014; Royal College of Physicians, 2015). However, although CGA is seen as the ‘gold standard’ in assessment for older people, a number of questions remain around its content, goals, who should undertake it, which patients benefit mostly, and at which moment their use is most efficient (Bakker and Olde Rikkert, 2015).

### 2.3.2 Purposes of CGA

The use of an assessment can serve several purposes, which are outlined below. Evidence on whether or not these purposes have been reached is discussed later in this chapter where the findings from a systematic review are presented.

Most purposes of assessment in general were found in the literature related to CGAs specifically. The definition of CGA, as given before, contains the purpose to diagnose a person’s medical, psychological and functional health status. Including more dimensions to the assessment may lead to additional diagnoses. These diagnoses should lead to a comprehensive and long-term care plan to coordinate and provide rehabilitation for the patient, ideally maintaining their independence, decreasing readmission to the hospital, and increasing efficient health care use including preventative services (Elsawy and Higgins, 2011; Wiggins and Bitzer, 2012). Other aims are to decrease length of stay in hospital, increase survival, increase satisfaction for the patient and health professional, increase patient’s quality of life, and decrease costs. (Luk, Or and Woo, 2000; Bernabei,

et al., 2000; Wieland and Hirth, 2003; Ellis and Langhorne, 2004; Soejono, 2008). Wieland and Hirth (2003) mentioned using CGA to determine baseline data or to measure patient outcomes in research studies, and to inform service payment. Carpenter (1998) gave purposes for a standardised assessment in the community, which are also relevant to hospital care. These purposes included enhancing good practice, using it as a basis of information for client and professional, to avoid duplication of work, and generating useful information for managers to understand the needs of their population. On a broader level data may be collated to inform research and to inform planners and policy-makers (Carpenter, 1998).

Purposes of CGA have reached beyond the general care of older people, as they are used in a variety of different specialties. Studies have been published regarding CGAs in the emergency departments, usually continuing into the community setting. These assessments and their interventions mainly focus on referrals to community services and providing advice to avoid hospital admission (Basic, Conforti and Rowland, 2002; Caplan, et al., 2004; Basic and Conforti, 2005; Fealy, et al., 2009; Foo, et al., 2012; McCusker, et al., 2012; Conroy, et al., 2014). Several studies have addressed CGAs for older people suffering from cancer (Parks, et al., 2012; Spina, et al., 2012; Hamaker, Prins and Stauder, 2014; Indrakusama, et al., 2014; Merli, et al., 2014; Puts, et al., 2014). Their aims are mainly to decide which treatment to use given the patient's health status, and to anticipate the treatment's toxicity. Also, studies have focussed on CGAs and renal dialysis (Parlevliet, et al., 2012; Wiggins and Bitzer, 2012), osteoporosis (De Rui, et al., 2012), surgery (Partridge, et al., 2014; Dale, et al., 2014), and ICU patients (Raveau, et al., 2013). The feasibility and usefulness of CGA is usually mentioned, however the effect of these assessments with these target groups needs further research, using larger sample sizes and stronger methodologies. CGAs are also used to predict mortality or health risks (Drame, et al., 2012; Rodriguez-Pacual, et al., 2012; Stortecky, et al., 2012). Volpato, et al. (2014), Pilotto, et al. (2007; 2008; 2009a; 2009b; 2012), and Aucella, et al. (2012) have published several studies regarding the development and use of a Multi-dimensional Prognostic Index, a tool derived from a CGA to predict mortality for different patient groups. Others (Jones, Song and Rockwood, 2004; Oo, et al., 2013) use CGA to create frailty indexes and frailty screenings. Some focus on the assessment by a physician versus a self-assessment by the patient (Beachet, et al., 2014). Lastly, a quest has arisen for the development of a screening tool to decide whether a patient is in need of a CGA (Boyd, et

al., 2008; Graf, et al., 2011). Such a tool identifies those who could benefit from a CGA most, enhancing its efficient use (Wieland and Rubenstein, 1996).

Overall, the purposes of assessment practice, and CGA in particular are variable. It included purposes to enhance patient outcomes, but it also focused on enhancing care processes and perceptions of care.

### 2.3.3 A systematic review on the effectiveness of ward-based CGAs

CGAs have been presented as the 'gold standard' in the literature on assessing older people. This chapter will review the evidence of the effectiveness of CGAs undertaken on wards for older people.

#### *2.3.3.1 Aim of the systematic review*

The aim of this systematic review was to explore the effects of using CGAs on inpatient hospital wards for older people.

#### *2.3.3.2 Search strategy*

The search was started in Medline using a general term to find studies regarding CGA for older people. Inconsistent, and at times limited MeSH-term use in relevant studies, meant a search with only MeSH-terms was not possible. Due to a large body of literature on the subject under study, it was also not possible to just use a broad search with only a few search terms. Therefore, one string was used as a basis (Box 1) and when a large number of irrelevant studies were found, the search was combined with other strings or limits were applied. Terms were chosen and search strings were created based on key words found in relevant studies. The initial search term for Medline was translated and adjusted for other databases, including Cochrane, Cinahl, Scopus, Web of Science, Assia, and Psychinfo. The full search terms can be found in Appendix 1. Due to the number of literature reviews, systematic reviews, and meta-analyses found in the original search it was decided to focus on these specific studies to review the effects of CGA. Limits were used for English, Dutch, systematic review, literature reviews, and meta-analyses. For a few databases the age was limited to 65 and older, due to the large number of studies presented focusing on younger participants.

*Box 1, Basic search string*

"comprehensive geriatric assessment" OR "inpatient rehabilitation" OR "geriatric management" OR "geriatric management and evaluation" OR "geriatric evaluation" OR "geriatric service" OR "geriatric care" OR "acute care for elders" OR "geriatric consultation" OR "geriatric unit" OR "geriatric units" OR "geriatric assessment"
--

*2.3.3.3 Inclusion and exclusion criteria*

The focus of this review is on inpatient ward-based CGAs. In this section decisions around the exclusion and inclusion of studies will be explained.

The decision to focus on ward-based CGAs, meant that community-based CGAs and mobile geriatric hospital teams were excluded. Community-based assessments include those that are started at the hospital and continued in the community. The decision to exclude community-based CGAs was taken due to their fundamental differences compared to inpatient ward-based version. Community-based CGAs, although sometimes started in hospital, are mostly conducted in the community, aiming to assist older people living at home. A hospital-based CGA aims to provide comprehensive care to the patient whilst admitted to a hospital ward and informs discharge planning. Therefore, the aims and subsequently the focus of hospital-based and community-based CGAs are different.

Mobile inpatient teams of HCPs undertaking CGAs to advise ward-based teams are known as Inpatient Geriatric Consultation Services (IGCS). Where inpatient ward-based CGAs mean that the assessment and interventions are fully conducted by a ward's own staff, with an IGCS the assessment is carried out on a consultancy basis by a team of professionals not necessarily attached to the ward. IGCS programs include different content, team sizes and disciplines, which means it is challenging to compare them to one another (Deschodt, et al., 2016). The integration and follow-up of the interventions lies with the ward team, and IGCS seems to result in reduced compliancy compared to ward-based CGAs (Wieland, 2003; Ellis, et al., 2011; Totten, et al., 2011; Deschodt, et al., 2013). Compliance rates for outpatient assessments and IGCS show rates ranging from 46% to 85.4% (Reed, Kligman and Weiss, 1990; Devor, et al., 1994; Cefalu, 1996; Maly, et al., 1996; Reuben, et al., 1996; Leduc, et al., 1998; Aminzadeh, 2000; Morin, et al., 2012). Ellis, et al. (2011) found that effects of ward-based CGAs were not found for IGCS approaches. This included the outcomes of patients living at home a year after admission (ward-based: OR 1.22, 1.10 to 1.35,  $p < 0.001$ ,  $N = 6290$ ; IGCS: OR 0.75, 0.55 to 1.01,  $p = 0.06$ ,  $N = 772$ ) and



patients living in residential care a year after admission (ward-based: OR 0.73, 0.64 to 0.84,  $p < 0.001$ ,  $N = 6252$ ; IGCS: OR 1.16, 0.83 to 1.63,  $p = 0.39$ ,  $N = 485$  participants). The lack of effects for IGCS approaches on patient outcomes was also found by Deschodt, et al. (2013). Therefore, based on the differences between IGCS and ward-based CGAs in content, compliance, and effects, IGCS studies were excluded from this review.

The literature presents three hospital programs focused on assessing older people: Acute Care for Elders (ACE), Nurses Improving Care for Healthsystem Elders (NICHE) and Hospitalized Elder Life Program (HELP) (Steele, 2010). ACE includes the use of a CGA and this is reviewed daily by a multi-disciplinary team (Landefeld, et al., 1995; Amador, Reed and Lehman, 2007; Steele, 2010). Therefore, studies regarding this program are included in this review. NICHE is a resource program aiming for education and knowledge enhancement amongst professionals regarding the care of older people (Boltz, et al., 2008; Steele, 2010), and is therefore beyond the scope of this review. HELP includes the screening of six risk factors: cognitive orientation and impairment, sleep deprivation, immobility, vision impairment, hearing impairment, and dehydration (Inouye, et al., 2000). Although these factors are relevant aspects of a CGA, they do not represent a full CGA, leading to exclusion of this program from this review. Therefore, of the three hospital programmes, only ACE will be included in this review.

Due to overlap with CGAs, Quality of Life (QoL) assessments need to be addressed here. A QoL assessment tool developed by the WHO (2012b) explains the focus of the assessment questions to be on a person's quality of life, which they defined as:

*'Individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.'* (WHO, 2012b)

McClane (2006) suggested a QoL assessment including six domains similar to those mentioned for CGAs: physical, mental, social, spiritual, financial, and environmental. Evans, et al. (2005) developed and validated a QoL assessment and mentioned that:

*'It can form part of a comprehensive assessment for older people'.* (p.1291)

The difference between QoL assessments and CGAs can be explained with an example. The WHOQOL's (WHO, 2012a) questions around pain do not include a question on whether the patient is currently in pain, focusing on fear of or worry about current or

potential future pain. It similarly asks the patient whether they are comfortable and happy where they live, but it does not ask where they live or whether they can manage the stairs. These questions would be part of a CGA (Wieland and Hirth, 2003). Mountain, et al. (2004) studied the use of QoL for older people in hospital, and found only a few physicians (Senior House Officers 17.5%, Specialist Registrars and Consultants Geriatricians 10%) thought it useful for managing inpatient care, which in turn is the sole focus of a ward-based CGA. They did, however, think it could be useful for discharge planning (Senior House Officers 39.65%, Specialist Registrars and Consultants Geriatricians 52.6%). Therefore, CGAs focus on the actual health status of patients using tests as the Timed Up and GO test to measure patients' mobility. QoL assessments can be a valuable part of such CGAs as it provides insight into the patient's perceptions and expectations of their health. This may support setting short and long term goals as part of the assessment process. However, as this review of the literature focuses on CGAs, studies including only individual QoLs, which have a primary focus on perceptions on health, will not be included. Studies in which QoL assessment have been a part of the CGA will be included.

In this systematic review the focus will be on the use of CGAs on wards for older people. Therefore, studies in which the focus is on a patient group with a specific illness, will be excluded as their aims of using CGAs differ from the aims of using these assessments as part of the care of older people. For instance, within cancer management CGAs are used to decide on treatment dose, or to predict treatments' toxicity (Spina, et al., 2012; Puts, et al., 2014). Eventually the following search criteria have been used:

Inclusion criteria:

- Reviews or meta-analyses including studies in which a CGA was undertaken by a ward-based team to inpatients on a ward for older people, and where data were compared to either the baseline data of the same group, or to a usual care group in history or in the present.

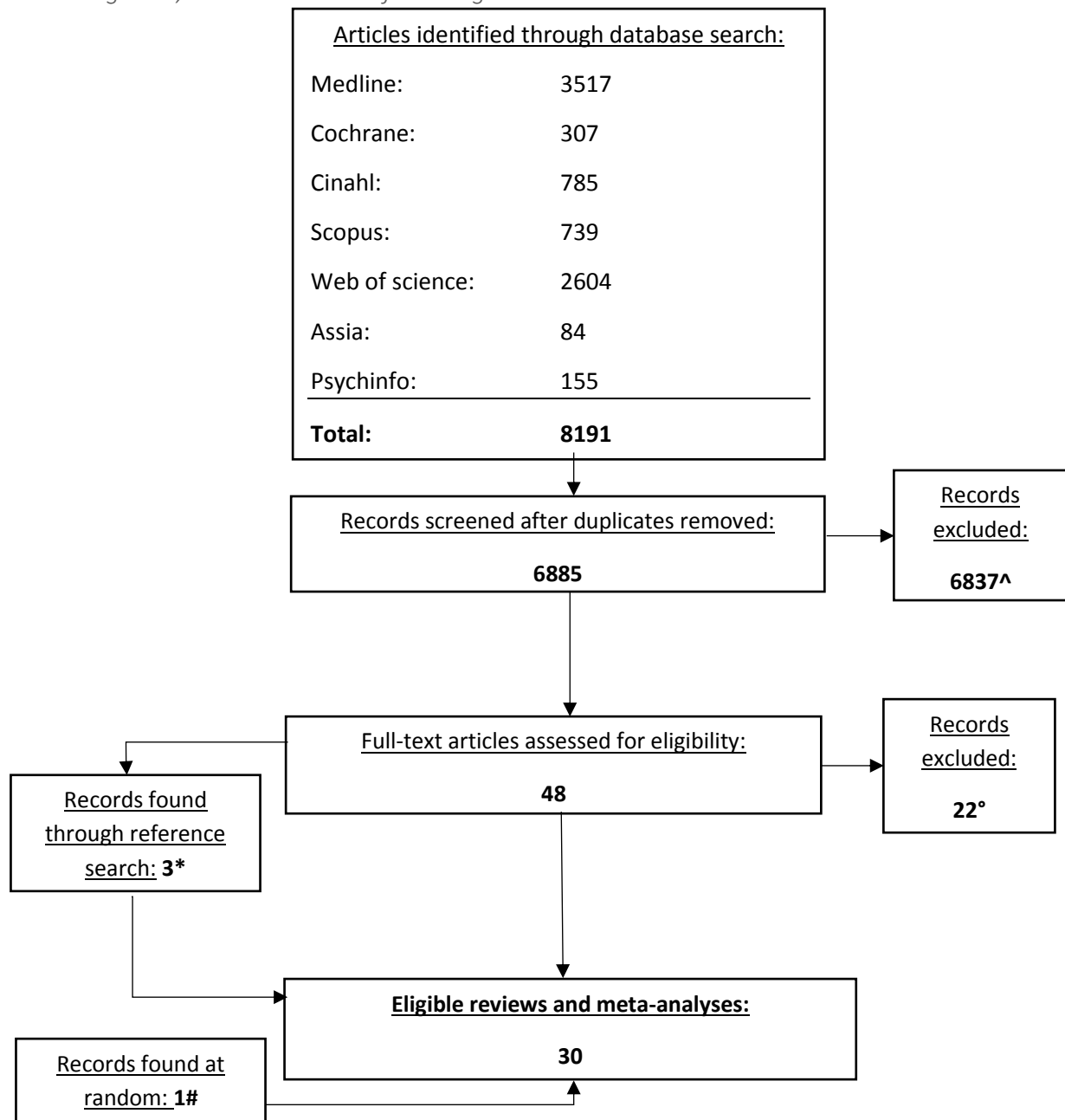
Exclusion criteria:

- Studies written in another language than English or Dutch, due to the author's inability to read other languages.
- Studies where CGAs were used to provide baseline data, or to measure outcome variables.

- Studies focussing on the management of single diseases such as chemotherapy to treat cancer or dialysis to treat kidney failure.
- Studies focusing solely on NICHE or HELP programs.
- Studies focusing on QoL assessments rather than a CGA.

Studies providing an overview of models of care including CGA programs, in which the search and inclusion of literature focuses on describing and/or appraising the programs rather than critically evaluating all available evidence of their effects.

Figure 1, Literature search flow diagram.



\*Fox, et al. (2013), Kamel, Jarrett and MacDonald (2005), Day and Rasmussen (2004).

#Cordato, Saha and Price (2005), found when doing broad literature search around assessing older people. ^Did not meet inclusion criteria. °Reasons for exclusion: other design than review/meta-analysis (n=1), different target group (N=4), intervention not CGA (n=2), not in English (n=1), description of care programme (n=11), overview of care programmes rather than systematically reviewing effects (n=3).

#### 2.3.3.4 Findings

Figure 1 shows the literature search process and results. It presents one record found 'at random', which is a review by Cordato, Saha and Price (2005). This article is not classed as a review in Medline, and therefore not visible in the search, which was limited to reviews and meta-analyses. Neither has it been referenced by other eligible studies. It was found during a literature search regarding the topics addressed earlier in this review. Due to it fitting the criteria, it has been included here. A review by Allen and Turner (2008), which was found via references by Fox et al. (2012), is not mentioned in the databases and an abstract nor the full text was found. Therefore, it was not included in the review presented here.

This review aimed to look at the evidence regarding the effects of ward-based CGAs. In the most recent revision of the pyramid of scientific evidence of effectiveness (Murad, et al., 2016), systematic reviews and meta-analysis remain at the top, suggesting they are the highest form of evidence. However, they are now separated from the lower section of the pyramid, representing the original study designs such as RCTs and case control studies. This is to symbolise that systematic reviews and meta-analyses are:

*'A lens through which evidence is viewed.'* (Murad, et al., 2016)

Although it remains debateable whether a meta-analysis is appropriate regarding this topic, due to heterogeneity (Murad, et al., 2016) concerning target groups, assessment content, intervention, follow-up period, study designs and outcome measures, they do provide an overview of the effects of CGAs as they are currently documented in the literature.

A total of thirty reviews and meta-analyses focusing on ward-based CGAs were found. A few years after the first reviews on this topic (Applegate, et al., 1991; Cole, 1991; Rubenstein, et al., 1991), the first meta-analysis was undertaken by Stuck, et al. (1993). Many reviews and meta-analyses followed (Evans, et al., 1995; Quartararo, 1996; Scott, 1999; Luk, Or and Woo, 2000; Parker, et al., 2000; Wieland, 2003; Day and Rasmussen, 2004; Ellis and Langhorne, 2004; Cordato, Saha and Price, 2005; Kamel, Jarrett and MacDonald, 2005; Hickman, et al., 2007; Baztán, et al., 2009; Ahmed and Pearce, 2010; Bachmann, et al., 2010; Steele, 2010; Van Craen, et al., 2010; Bakker, Robben and Olde Rikkert, 2011; Ellis, et al., 2011; Linertová, et al., 2011; Totten, et al., 2011; Fox, et al., 2012; 2013; Kosse, et al., 2013; Ekdahl, et al., 2015; Pilotto, et al., 2017). Some of the

studies focussed only on inpatient assessments for acute, sub-acute or post-acute hospital care; others also included IGCS, outpatient or community assessments, presenting sub-analyses per group. In the review presented here, the ward-based CGA sub-analyses have been focused on. Slightly different aims and inclusion and exclusion criteria provide differences between these studies. For instance, the difference in included studies by Fox, et al. (2012; 2013) and Ellis, et al. (2011) is due to differences in included designs, specific conditions, and dates when the search was performed. The tables in Appendix 2 present the characteristics and findings of the included studies, as well as an assessment of the quality of the included studies, focusing on meta-analyses and reviews separately. The Quality Assessment Tool for Systematic Reviews and Meta-Analyses was used to systematically appraise the quality of each included study (National Institutes of Health, 2014).

#### 1. Findings from meta-analyses

Five of the six most recent meta-analyses (Baztán, et al., 2009; Bachman, et al., 2010; 2010; Ellis, et al., 2011; Fox, et al., 2012; Ekdahl, et al., 2015) present tests regarding statistical heterogeneity when appropriate, and all six provide adequate information concerning aims, inclusion criteria, sample sizes, and sub-group analyses. Overall, the six recent meta-analyses are of good quality (Appendix 2). When looking at the target groups of each meta-analysis, it includes units based on the characteristics of the ACE Program (Fox, et al., 2012), geriatric units or GEMUs in hospital (Baztán, et al., 2009; Van Craen, et al., 2010; Ellis, et al., 2011; Ekdahl, et al., 2015), and areas focusing on rehabilitation (Bachman, et al., 2010). All reviews focus on patients of 65 years and older, except for Bachman, et al. (2010), who includes studies with patients from 55 years of age.

The table with outcomes from meta-analyses (Appendix 2) shows how many different measures have been used to evaluate the effectiveness of CGAs. Most meta-analyses give both statistically significant, as well as statistically non-significant outcomes, except for Bachmann, et al. (2010) who did not find any statistically significant outcomes. Bachman, et al. (2010) was the only study focusing on the rehabilitation setting.

Mortality was measured in all studies, with none finding a statistically significant result. Re-admissions were measured in four studies (Van Craen, et al., 2010; Ellis, et al., 2011; Fox, et al., 2012; Ekdahl, et al., 2015) and none of them found a statistically significant effect. Costs were analysed by two studies (Báztan, et al., 2009; Fox, et al., 2012), both

showing statistically significant effects of CGA compared to usual care, which means the intervention was cheaper than usual care. However, other studies omitted this analysis due to heterogeneity of the included studies and therefore did not present findings on this outcome measure (Ellis, et al., 2011).

For other outcome measures the findings remain inconclusive, which can be illustrated with a few examples. Where Ellis, et al. (2011) found a statistically significant effect of CGA on cognitive function (SMD 0.08, 0.01 to 0.15,  $p=0.002$ ,  $N=375$ ), the findings from Ekdahl for frail patients did not support this (SMD -0.06, -0.20 to 0.07,  $p=0.35$ ,  $N=820$ ). Where Fox, et al. (2012) found a statistically significant effect of CGA on the length of stay (RR -0.61, -1.16 to -0.05,  $p=0.03$ ,  $N=3956$ ), Van Craen, et al. (2010) did not support this finding (EH, 0.07, -0.11 to 0.26,  $p=0.46$ ,  $N=3759$ ). An often mentioned effect of CGA was reported by Ellis, et al. (2011) as they found a statistically significant effect from the use of CGA compared to usual care for patients living at home at six months' follow-up (OR 1.31, 1.15 to 1.49,  $p<0.001$ ,  $N=4624$ ) and at twelve months follow-up (OR 1.22, 1.10 to 1.35,  $p<0.001$ ,  $N=6290$ ). Ekdahl, et al. (2015) found a similar result for frail patients being discharged to their original form of housing before admission (RR 1.17, 1.07 to 1.28,  $p=0.0005$ ,  $N=1060$ ). However, although Báztan found a similar statistically significant effect for patient living at home immediately after discharge (OR 1.30, 1.11 to 1.52,  $p=0.001$ ,  $N=2632$ ), they also found that this effect was no longer visible at three months' follow-up (OR 1.16, 0.99 to 1.37,  $p=0.07$ ,  $N=1964$ ). Similar to these inconclusive outcomes are findings regarding, for instance, ADL and functional status (Appendix 2).

It seems the effects of using a CGA on patients admitted to a ward for older people, compared to usual care, remain inconsistent. Some have mentioned how this could be enhanced by focusing CGAs towards frail older people (Ellis, et al., 2011). The most recent meta-analysis by Ekdahl, et al. (2015) divided the participants of included studies into groups of frail and moderately frail patients, based on the baseline information around clinical conditions, diseases, and disabilities. Their study provides evidence to support the idea that CGAs are more effective for frail patients than moderately frail patients (Ekdahl, et al., 2015). They did not find any statistically significant effects of CGAs on moderately frail older people. However, they did find statistically significant outcomes for frail older people who received a CGA rather than usual care (See Appendix 2). These were less depression amongst the patients although the authors stated the evidence for this was

insufficient, patients being able to be discharged to their pre-admission housing, and a lower increase for personal ADL needs (Ekdahl, et al., 2015).

## 2. Findings from systematic and literature reviews

The systematic and literature reviews are summarised in a separate table to the meta-analyses in Appendix 2, and their quality is also appraised in another table in Appendix 2. The quality of the reporting of the methods used in the review has enhanced over the years, with the later studies providing more information than the earlier ones, for instance, on literature search dates and exclusion criteria. Additionally, systematic reviews provide more information on the methods used compared to the literature reviews.

The conclusions present a similar inconclusiveness as was found in the meta-analyses. Some studies presented mainly positive outcomes, such as Ahmed and Pearce (2010), Steele (2010), and Kosse, et al. (2013). Others report mainly a lack of positive outcomes, such as Bakker, et al. (2011), and Linertova, et al. (2011). Some mention inconclusiveness of findings regarding their outcome measures, such as Luk, Or and Woo (2000), Parker, et al. (2000), and Kamel, Jarrett and MacDonald (2005). These last three studies, however, were of lower quality compared to the ones which found either mainly positive or mainly negative outcomes. Nonetheless, the literature and systematic reviews show a similar pattern as the meta-analyses with a lack of consistency in the findings regarding the effects of ward-based CGA on patient outcome measures such as mortality, discharge home, discharge to a care facility, ADL, and length of stay.

### *2.3.3.5 Summary*

Most reviews and meta-analyses include similar original studies, causing overlap between them. Key original studies with large sample sizes include Rubenstein, et al. (1984), Collard, Bachman and Beatrice (1985), Applegate, et al. (1990), Landefeld, et al. (1995), Harris, et al. (1991), Nikolaus, et al. (1991), Asplund, et al. (2000), Counsell, et al. (2000), Cohen, et al. (2002), and Saltvedt, et al. (2002), and these are used by many of the included reviews and meta-analyses. Being able to find thirty of these studies that reviewed the effects of ward-based CGA, it seems additional reviews are not necessary, unless after new original studies have been undertaken or a new approach is taken. For instance, Ekdahl, et al. (2015) used a new approach by separating findings for frail and moderately frail older people.



The main issue around reviewing the effects of ward-based CGAs is heterogeneity, which complicates comparison of the included reviews. The heterogeneity is found both within the original studies which are included in each review, but also between the included reviews. In original studies variety was found in a number of aspects, such as study designs, assessment and intervention content and ways of delivery, settings, and target groups (Bachmann, et al., 2010; Van Craen, et al., 2010; Ellis, et al., 2011). In relation to the reviews and meta-analyses, heterogeneity was found in settings, included outcome measures, dates for literature searches, and inclusion- and exclusion criteria (Appendix 2). As mentioned earlier in this review, comparing these reviews may be difficult as they are all different in many ways. Additionally, the appropriateness of using an RCT design to test the effects of such a complex context related intervention, resulting in meta-analyses, may be questioned. However, currently the literature holds mainly these studies regarding using CGAs in practice. Therefore, the above systematic review provides an overview of the current knowledge on this topic.

To move research regarding the use of CGAs into the future, several strategies can be used, such as targeting those who are most frail (Ekdahl, et al., 2015), and providing more detailed description of CGA programmes and usual care. Such a comprehensive description may make it possible to further understand differences between CGA programmes and usual care, as well as provide insight into how different aspects of CGAs may contribute to its effectiveness (Wieland and Rubenstein, 1996; Baztán, et al., 2009; Ahmed and Pearce, 2010; Bachmann, et al., 2010; Ellis, et al., 2011; Fox, et al., 2012; Deschodt, et al., 2013). Additionally, although views of HCPs regarding the use of CGAs can be found in findings that health professionals' satisfaction did not decrease despite changes in practice when a CGA was implemented (Soejono, 2008; Ahmed and Pearce, 2010), the studies discussed in this review focused mostly on effectiveness of CGAs on patient outcomes. However, effects could also be found in the previously listed purposes of CGA, including enhanced planning, more efficient coordination of care and better experiences of care by both professionals and patients (Fox, et al., 2013), but these outcome measures have not been included in intervention studies comparing CGAs to usual care. Qualitative study designs seem most appropriate to further understand the process of using a CGA on a ward for older people, as it allows those who are involved in this process to discuss its use and explain barriers and facilitators.

In summary, the effectiveness of CGAs on patient outcomes has been studied widely with the findings remaining inconsistent. The complexity of the intervention and its context results in heterogeneity on many different aspects, making it more difficult to compare and combine findings from different studies. In addition, questions remain regarding who benefits most from CGAs, and which characteristics or combination of characteristics of CGAs are most beneficial for patients and/or professionals (Bakker and Olde Rikkert, 2015). The effects of CGAs on other outcomes such as perceived value and care processes are underrepresented in the literature. Conclusively, although CGAs are currently perceived as the 'gold standard' within assessing older people (Department of Health, 2001; Ellis, et al., 2011; Vize, 2012; NHS England South, 2014), the evidence is not as convincing as the status of 'gold standard' might suggest.

#### 2.3.4 The perceived value of CGAs in clinical practice

When looking at CGAs, the literature does not seem clear regarding its perceived value and its current use in day-to-day practice. As mentioned earlier the professionals' perceived satisfaction with care was measured in two reviews, showing it did not decrease despite changes in practice when a CGA was implemented (Soejono, 2008; Ahmed and Pearce, 2010). Other outcome measures in the reviews and meta-analyses did not include the perceived value of the process by those involved.

DeVriendt, et al. (2013) did conduct such a study, focusing on how professionals value the use of a CGA in care practice. They incorporated the interRAI Acute Care into an e-health system in Belgium, aiming to use one assessment across different settings. They evaluated this assessment in a cross-sectional study with nurses, geriatricians, occupational therapists and social workers, who had received three days training regarding the use of the tool. Afterwards focus groups, observations, and questionnaires were used to evaluate its use in routine practice. Strengths included promotion of multi-disciplinary work and a fast and systematic multi-dimensional evaluation of each patient. Weaknesses included the need for extensive training, it being time-consuming, and overlap with other documentation. These findings show the CGA was valued, but not without its challenges. This study provided qualitative evidence regarding purposes of CGAs that focus on the process of care, rather than patient outcomes.

Langdon, et al. (2013), evaluated the use of the Adult Patient Assessment Tool (APAT) in a hospital. Although the APAT is not necessarily a CGA, it is an assessment tool used in the

care of older people covering a number of care aspects such as cognition, nutrition and medication use. The evaluation of its use in practice by Langdon, et al. (2013) may, therefore, be interesting in relation to the use of CGAs in practice. A medical record audit of 143 records in both 2005 and 2009 was undertaken, and two focus groups were conducted with twelve nurses in total. This showed statistically significant changes in the number of major sections completed. Some were filled in more in 2009, such as falls risk screening (49.6% compared with 46.2%,  $p=0.042$ ), and malnutrition screening (52.2% compared with 31.4%,  $p=0.005$ ). Whereas others were filled in less in 2009 compared to 2005, such as diet (41.4% compared with 64.2%,  $p=0.001$ ), discharge checklist (30.8 compared with 53.5,  $p<0.001$ ) and community services prior to admission (21.2% compared with 45.2%,  $p<0.001$ ). The focus groups with nurses showed they appreciated the tool's usefulness, however they felt in some circumstances, for instance for those admitted for a hernia repair, the full tool was irrelevant. Therefore, nurses tended to use clinical judgement in deciding which aspects of the assessment to use (Langdon, et al., 2013). They wondered whether the filled in assessment would be read by anyone. Some parts of the tool was perceived to be burdensome for the patient, such as mental health questions. Other disciplines than nursing seemed barely involved in the process of APAT (Langdon, et al., 2013).

Therefore, although the evidence is limited and additional research on this topic would be welcomed, these studies have addressed how professionals perceive the value of standardised assessment processes. Although professionals did not seem to express negative views, they did point out challenges such as prioritising aspects of the full assessment, and the usefulness of the documentation.

#### *2.3.5 Current assessment practice on wards for older people*

In this section the literature around the reality of current assessment practice is presented. Although the systematic review above provided clarity on the inconsistent findings regarding the effect of CGAs on patient outcomes, as well as point to the lack of insight into 'usual care'. Therefore, the focus of the literature review was moved towards studies focusing on the process and experience of 'usual care' assessment practice on a ward for older people. The initial broad search term for the systematic review presented above provided a few studies focusing on this topic. Additional searches were done adding words such as 'value', 'use' 'assessment' 'older people' and 'experience'. The literature that was found is presented below.

Recently an NHS benchmark project published their findings regarding care for frail older people in 47 acute care settings within the UK (NHS Benchmarking Network, 2017). Information was gathered regarding a number of topics, including the use of CGAs on units specifically for frail older people. It states 52% of the participating hospitals have such a unit and 89% of these units use CGAs. On other units 51% use a CGA (NHS Benchmarking Network, 2017). It is difficult to interpret these numbers for a variety of reasons. It is not entirely clear how data were gathered, through surveys or interviews. In addition, although a definition of CGA is given, it is not clear how the participants perceive a CGA and how it is conducted in practice. For instance, professionals stated that in 87% of the CGAs a nurse was involved, and in 88% a therapist was involved (NHS Benchmarking Network, 2017). CGAs should always be based on interdisciplinary teamwork, addressing a large number of care aspects for which input from nurses and therapists is crucial. 58% state their CGA process has led to a care plan which is discussed with the patient and relatives (NHS Benchmarking Network, 2017). By definition, however, a CGA should always lead to a care plan with short and long term goals. Therefore, it is unclear how assessment has been conducted in practice by those who state to use a CGA, and neither does this project provide insight into the assessment practice of those who do not state to use a CGA.

From the literature, as well as the researcher's personal experience, the impression is that CGAs are not widely used (Gladman, et al., 2016). This is potentially due to it being a complex intervention to implement into practice (Gladman, et al., 2016). A few studies have reported on the use of a specifically developed CGA tool in practice. In 2001 a project was started in the UK, which was called the Single Assessment Process, with the intention of using one assessment across different health care settings, reducing duplication of work and increasing cooperation between health professionals within and between settings (Challis, et al., 2010). This was an example of a third generation CGA. However, there were barriers to its use such as different settings using different logistical systems, and Challis, et al. (2010) found it was not widely incorporated into daily practice. Wellens, et al. (2012b) state that all eight versions of interRAI instruments, which are well-developed and tested CGAs, are now used in over thirty countries. Although one of these versions is the interRAI acute care, it is unclear to what extent and where this particular instrument is used. Others have mentioned the broad use of programmes or interventions which include CGAs, such as the Acute Care for Elders (ACE) units, however precise

numbers and exact locations are not documented or they seem outdated (Jayadevappa, et al., 2003; Siegler and Glick, 2003). In summary, no exact numbers are available regarding the use of CGAs on hospital wards for older people. The British Geriatrics Society has recently started a study on the current use of CGAs in the UK, which may provide further insight into this (British Geriatrics Society, 2016).

A few studies focused on professionals conducting single domain assessment in their day-to-day practice. Persenius, et al. (2008) studied nurses' assessment techniques from municipalities and hospitals regarding nutritional needs, using interviews and questionnaires, concluding assessments and documentation were unstructured and not routinely performed. Persoon, et al. (2011) used a qualitative approach and concluded that Dutch nurses do not use a standardised assessment method to assess and report on older people's cognition. These findings support the idea that the use of CGAs is not universal and may be relatively low.

Another argument regarding the use of CGAs in practice can be found in most effect studies comparing the intervention of a CGA with usual care, as authors seem to interpret usual care as care without a CGA. However, usual care is underreported in most studies and therefore it remains unclear what it contains exactly. Nonetheless, usual care is expected not to be a CGA as then the comparison would be between similar practices.

In summary, limited literature shows CGAs are not standard practice. In addition, the project by the NHS Benchmarking Network (2017) showed that when a CGA is claimed to be used, the interpretation of what this means is not always in line with the definition of it. The contents of what is actually done in daily practice and what is perceived as 'usual care' is not clear in the literature. Nonetheless, care is provided by professionals who aim to meet patients' needs. Therefore, currently it is unclear how older people are assessed in day-to-day hospital care in the UK.

## 2.4 Summary

The literature showed the increasing care needs of older people, and these were explained around the presence of multi-morbidity, frailty, and disability. The context and culture of the care of older people within the UK has been addressed, showing the difficulties and challenges within geriatric care in relation to funding and resources, societal perceptions, and attitudes of professionals towards the care of older people. The cultural aspects of the care of older people, involving PCC, SDM, and multi-disciplinary

teamwork, presented challenges in their implementation and use in practice. This showed a discrepancy between what is perceived as ideal care of older people, and the reality of care of older people.

Assessing the needs of older people admitted to hospital showed a development from first generation assessments towards third generation assessments. The literature and the international and national guidelines advocate CGA as the 'gold standard' within assessing older people. CGAs are assessments in which professionals aim for standardisation and a structured, formalised approach. The effectiveness of CGAs on patient health outcomes showed inconsistent findings. However, heterogeneity of the content of interventions, use of outcome measures, study designs, and target groups presents challenges in the review and comparison of the findings. As the study evolved the inconclusive findings on the effectiveness of using CGAs on wards for older people were combined with literature and personal experience which showed CGAs are not always used in practice. However, the absence of a CGA does not mean the absence of assessment altogether. Patients are currently cared for on hospital wards, and professionals aim to meet their care needs. This suggests care needs are being assessed. Therefore, literature regarding the process of every day practice was searched and found to be limited. Although evidence regarding the content and experience of 'usual care' was scarce, it seemed CGAs were not always part of practice on a ward for older people.

Therefore, there is a gap in the literature on the content and process of current assessment practice within the context and culture of hospital wards for older people. How are patients assessed on these wards and how is this practice perceived by those involved? The answer to this question may not only provide insight into current practice, but may also contribute to further understanding of why CGAs are not fully incorporated in current practice, and whether or how this could be developed in the future. This study will therefore focus on the following aim:

**To explore the assessment process on a ward for older people from the perspectives of both patients and professionals.**

## Chapter 3: Methodology and methods

---

This chapter starts with an introduction to the philosophy of science, then moves towards paradigms, methodologies, methods, rigour and ethical considerations. The choice of paradigm, methodology and methods for this study is presented as a journey. It represents how the researcher searched through the options and eventually chose an appropriate methodology and suitable methods.

### 3.1 An introduction to the philosophy of science

#### 3.1.1 The main ideas

This section aims to create a philosophical foundation from which the methodology and methods are chosen. Therefore, this section is not exhaustive, but aims to provide a summary on which the rest of the chapter is built. The philosophy of science is concerned with:

*'Methods used by science, and the grounds on which scientific claims about the world are made.'* (Thompson, 2012, p.5)

Through the decades' philosophers, such as Socrates, Plato and Aristotle, have thought about how knowledge is gained, or should be gained in order to understand the world. In the 17<sup>th</sup> century thinkers such as Galilei (1638) and Descartes (1637) argued that science should be based on evidence and reason, basing their approach within a mathematical way of thinking. Bacon (1605; 1620) suggested all knowledge should be based on evidence and experiments aiming for objectivity. And even though Copernicus (1543) had already mentioned that some evidence can be interpreted in different ways, therefore challenging the possibility of objectivity, philosophers continued to be taught within the exact sciences, continuing the search for measurable and objective results.

However, not everyone agreed with the aim of strict objectivity and over the decades' others tried to find alternative ways to find evidence to gain knowledge. Despite critique from objectivists, the quest to study the world using less strict objective measures became stronger. Locke (1689), for instance, attempted to make a distinction between primary qualities and secondary qualities, the first to be objective qualities that remain the same no matter who perceived it, and the second to be subjective qualities of which its interpretation depends on the observer. Locke argued that science should focus on primary qualities only. Hume (1738) argued humans are entirely subjective and therefore

unable to ascertain the truth, which should be objective. Evidence, therefore, cannot lead to absolute certainty. A milestone was made by Kant (1781; 1785), who argued there was a difference between our experience of things, and what things are in themselves, and we need an understanding of both to comprehend the complexity of our world. Marx, who focussed mostly on economy and politics, pointed the focus of his study toward humans and their behaviour (Marx and Engels, 1848). However, this approach received critique from later thinkers such as Popper (1959), who named it a pseudo-science due to it not being open to contradictory evidence, and instead adapting the conclusions to include the contradictory evidence. Popper (1959) states that science has to be open to contradictory evidence to determine the correctness of theories, in order to either reject them or to continue their use. Popper (1959) developed the theory of falsification, which means that knowledge holds true until proven otherwise. Within falsification there is always the possibility of rejecting knowledge and acknowledging it being incorrect. Thus, where verification focuses on proving the theory, falsification focuses on disproving a theory.

In summary, over time ideas have changed in regard to what was believed to be evidence, and what was believed to be knowledge. Great thinkers gave their ideas regarding objectivity and subjectivity, often aiming for a solution that incorporated both. In doing so they placed their beliefs somewhere on the continuum between objectivity and subjectivity in an attempt to gain an understanding of reality. In the following sections the different ideas regarding reality, evidence, and knowledge will be further discussed and explained in relation to research paradigms.

### 3.1.2 Paradigms

Fleck (1935), a medical doctor and biologist developed the concept of ‘thought collectives’. He suggested that ‘facts’ or ‘truth’ found through studies conducted by researchers existed in a constructed reality. This reality was built by the researchers who were part of so called ‘thought collectives’, including languages, principles, and ways of thinking. This concept describes a paradigm without using this particular term. Kuhn (2012) defines a paradigm as:

*‘Universally recognized scientific achievements that for a time provide model problems and solutions.’ (p.xlii)*

Kuhn (2012) argued the concept of a paradigm to be inappropriate for the social sciences, but he did find it to be useful in the natural sciences. This idea came from Kuhn’s belief



that science was characterised by following one fundamental idea on which everything is based. Only in crises, or when a paradigm shift was imminent this fundamental idea could be discussed and critiqued. Kuhn's personal observation of the social sciences, on the other hand, showed on-going disagreement in regard to certain fundamental theories and concepts (Kuhn, 1970). Nonetheless, Kuhn's ideas have been used extensively by those working within social sciences. A more recent definition of a paradigm is:

*'A world view underlying the theories and methodology of a particular scientific subject.'*  
(Oxford Dictionary of English, 2015)

A *'paradigm shift'* (Kuhn, 2012) then, refers to changing the accepted world view, usually due to new insights that show the change of values and beliefs that held strong within the previous paradigm. This can change the way evidence is perceived and the way knowledge of the world is obtained. For instance, people used to believe the sun was turning around the world. However, through physics it became known that the earth turns around the sun. The objective mathematical measures became new evidence changing the way people perceived what they thought to be true and what they thought to be knowledge.

Guba and Lincoln (1994) described paradigms based on ontology, epistemology, and methodology. Ontology refers to what reality is, epistemology refers to what knowledge is, and methodology refers to how knowledge about reality can be obtained. Creswell (2013) has suggested adding axiology, which focuses on the role of individually shaped values and beliefs within research. In an older edition (Creswell, 2007) he also suggested rhetorical assumptions, which focuses on the use of language in research, but this has been removed in the newest edition. Ontology, epistemology and methodology will be discussed regarding paradigms such as positivism, post-positivism, interpretivism/constructivism (further called constructivism), and pragmatism. And despite the importance of these paradigms it seems appropriate to keep the following in mind:

*'Paradigms should be viewed as lenses that help to sharpen our focus on a phenomenon of interest, not as blinders that limit intellectual curiosity.'* (Polit and Beck, 2016, p.12)

The different paradigms lead to different research approaches. In the following paragraphs the paradigms and their consequences for research will be further explained. Afterwards, the reasons for the chosen paradigm for this thesis is elaborated on.

### 3.1.2.1 Positivism

The ideas of positivism were already used in the 17<sup>th</sup> century by objectivists such as Galilei (1638) and Descartes (1637). Positivism was further developed by, for instance Bacon (1605; 1620), Locke (1689), and Comte (1970). The latter published several texts on how objectively observed and classified information can lead to knowledge (Comte, 1970; 1976). Within this paradigm knowledge is built by verifying results through further research, and rationalism is the way to realism. Rationalism means that truth is based on reason and knowledge and realists believe in the existence of an absolute and independent truth, which is an inflexible and unchangeable fact (Feyerabend, 1981). This links to the idea that context is not taken into account when looking for truth, since positivists believe that everything can exist independently and can be observed objectively (Bacon, 1620). Within realism the idea is that everything is 'finished' and 'out there', just to be observed or discovered. In positivism the researcher is seen as an independent 'tool' within their research, able to objectively observe or discover reality without influencing it:

*'Man as scientist is regarded as standing apart from the world and able to experiment and theorise about it objectively and dispassionately.'* (Hesse, 1980, p.vii)

Due to ignoring the context, this knowledge is generalisable to other settings and situations.

### 3.1.2.2 Post-positivism

Others, such as Popper (1959) and Kuhn (2012), disagreed with the positivist stance towards research and knowledge, and post-positivism became the alternative paradigm (Bryant and Charmaz, 2007; Tashakkori and Teddlie, 2010). Although they agree with the positivists on the need for objectivity, they disagree on the role of the researcher. Post-positivism places the researcher in their own reality, background, history, and principles, leading to observations by researchers which are coloured by their individual reality (Kuhn, 2012). Therefore, they agree with the positivists that reality is finished and 'out there', but post-positivists believe it cannot objectively be observed by the researcher since they come with their own beliefs, values and knowledge. This leads to the acknowledgement of different viewpoints, and the use of multiple measures and observations. Also, verification was replaced by falsification (Popper, 1959). Nonetheless, objectivity and non-biased results continue to underpin research within the post-

positivistic paradigm, although it is acknowledged that true objectivism is not possible. The context is taken into account and generalisability is more tentative than within the positivist paradigm.

### *3.1.2.3 Constructivism*

Constructivism was developed by thinkers such as Kant (1781; 1785), Weber (1904), and Piaget (1950). Three main ideas are important within the constructivist paradigm. The first is around the role of context in relation to understanding reality. Where positivists and post-positivists believe that reality is finished and 'out there', within constructivism reality is moving and under construction. Everything is interlinked with its context and nothing can be seen or interpreted without it (Weber, 1904). Within the constructivist approach, context is:

*'A process, dynamic, fluid and constantly moving.'* (Bate, 2014, p.11)

Another main idea within constructivism focuses on subjectivity. Weber (1904) noted absolute objectivity is not something humans can achieve. Kant (1781; 1785) agreed and argued the impossibility of understanding things in themselves, and that things are only known to man through experience structured in the mind. This means everything known to man is an individual perspective, an interpretation of reality based on the observer's unique mix of history, current ideas and beliefs, society, and context (Potrac, Jones and Nelson, 2014). Some even go as far as querying the existence of reality as matter altogether, as all we are able to know is based on our perception and interpretation and therefore reality only exists in the mind (Berkeley, 1710; Wolcott, 2008).

The paradigm constructivism moves beyond interpretivism alone, as was described by Walker and Dewar (2000):

*'Thus, the researcher no longer sees herself as interpreting the world but as fully participating in its social construction and as thus inside the body of her own research.'* (p.718)

The researcher is part of the context and the construction of reality. Therefore, the reality studied by the researcher is also influenced by the researcher. This is another main idea within constructivism and points to the constant construction of reality and the understanding of this reality. This was, for instance, argued by Piaget (1950), who

suggested children construct knowledge of reality through experiences. This knowledge base then builds over time as it changes and extends.

As a result of individuals constructing their own reality, the importance of context, the focus on perceptions of reality, and the existence of multiple perceptions, there is no absolute and objective truth. Instead truth exists in relative terms as it is influenced by, for instance, the context and the person who perceives it. Therefore, different and even conflicting perceptions of reality can exist in harmony, also called relativism (Darmstadter, 2016).

This leads to research which is characterised by attempts to understand the perceptions people have of their constructed realities within their complex context using materials such as stories, photographs and conversations (Denzin and Lincoln, 2005; Charmaz, 2014).

#### *3.1.2.4 Pragmatism*

Pragmatism is a philosophical tradition that was developed by thinkers such as Peirce (1877), Dewey (1929; 1931), and Mead (1938). By some it is used as a paradigm to underpin mixed method research (Tashakkori and Teddlie, 2010; Creswell, 2013), however it is not always acknowledged as a paradigm (Biesta, 2010; Lincoln, Lynham and Guba, 2011). Earlier, we defined a paradigm as a worldview, containing a stance on ontology, epistemology and methodology. Pragmatism contains all three and will therefore be included in this section.

Within pragmatism reality is seen as:

*'A moving whole of interacting parts.'* (Dewey, 1929, p.232)

This seems rather similar to constructivism; however, the difference is identified by Biesta (2010). Constructivists believe that reality is mind, and positivists believe it is body. In pragmatism these come together and both are needed to create meaning through action and interaction (Biesta, 2010). This points to the importance of action within pragmatism. Knowledge of reality has no meaning in itself, but it becomes something with human action:

*'But the role of action is that of an intermediary. In order to be able to attribute a meaning to concepts, one must be able to apply them to existence.'* (Dewey, 1931, p.25).

So then, when knowledge is gained by thought, reflection and action, truth is where a suggested meaning before the action, holds true after the action has taken place. Also described by Biesta (2010):

*'It has to do with the correspondence between suggested meaning and realized meaning, that is, meaning 'put into practice'.*' (p.110)

For example, if a chair is thought to be useful to sit on, only after actually sitting on the chair one can establish that the original thought was true. Action is therefore the crucial element in finding truth. Nonetheless, pragmatists believe in fallibility, which means that any truth or belief can be doubted and reviewed (Peirce, 1877).

Since pragmatists believe that both body and mind are important and come together through action and interaction, evidence to gain knowledge about reality can come in different shapes or forms:

*'But facts are not there to be picked up. They have to be dissected out and the data are the most difficult of abstractions in any field. More particularly, their very form is dependent upon the problem in which they lie.'* (Mead, 1938, p.98)

As a result, to this pragmatic approach to research, pragmatism has been used as a philosophical foundation for mixed method research (Biesta, 2010). Within mixed method research the question dictates the philosophical underpinning, research methodology and methods, and different approaches can be used together if required (Biesta, 2010).

#### *3.1.2.5 Critiquing different paradigms*

Guba and Lincoln (1994) wrote a comprehensive overview of the debates regarding the different paradigms, which is relevant to this day. Their discussion is mainly focussed around the debates discussing quantitative research versus qualitative research, and has been updated (Lincoln, Lynham and Guba, 2011). In both papers, pragmatism is not included in the comparisons.

Guba and Lincoln (1994) mention several critiques on the positivist and post-positivist quantitative approach. Most of these critiques note the lack of context regarding the researcher and what is being researched. Even though post-positivism has identified the importance of context, critiques argue this is not enough since nothing can be seen as 'independent' and everything has to be viewed within a theory or framework, meaning that context, including relationships, should always be a core aspect of every research.

Positivists and post-positivists on the other hand disagree with the subjective approach to research in other paradigms, defending the need for objective unbiased truths (Glaser, 2002).

Additionally, there are ongoing debates regarding the use of different research methods within all paradigms. Guba and Lincoln (1994) mention their support for researchers to appropriately use any method within any paradigm. In their update, Lincoln, Lynham and Guba (2011) also discuss the use of more than one paradigm at the same time and merging two or more paradigms in one research study. In their opinion only paradigms which are similar on the most basic grounds can be merged, such as positivist and post-positivist (Lincoln, Lynham and Guba, 2011). Tashakkori and Teddlie (2010) mention the use of several methods, both qualitative and quantitative, within one study. However, they do not agree with Lincoln, Lynham and Guba (2011) when they state this cannot be done within any paradigm of choice or by merging paradigms. Instead they describe the use of pragmatism as a paradigm in itself, in which methods are chosen based on the research questions, and are not necessarily chosen based on the paradigm in which the research is based. Practically, this could lead to the use of elements from different paradigms to ground the methods chosen within the pragmatic paradigm. This approach is defended by pointing to the importance of letting the research question ground the methodology and the methods, instead of letting the methodology steer the questions and the research (Mead, 1938).

### 3.1.3 Paradigm for this thesis

In this thesis the aim was to explore the assessment process from the perspectives of patients and professionals within the complex environment of a hospital ward for older people. The aim was not to find one truth, but to represent or interpret truths as perceived by the participants. Although the painter Picasso did not speak in the light of research or philosophy, his statement holds true:

*'If there were only one truth, you couldn't paint a hundred canvasses on the same theme.'*  
(Picasso, 1966, as quoted in Parmelin, 1969)

A constructivist approach was chosen, since this focuses on understanding different perspectives, and therefore multiple truths, on reality. In addition, it is based on beliefs that reality and the perceptions of it are continuously evolving as they are under construction and influenced by its surroundings. This means the participants' and the

researcher's perceptions on the topic under study, which is the assessment process, are influenced by their past and current experiences, interactions, values, beliefs, and knowledge. As the researcher is gathering and analysing data from the participants, they all become part of the research process. The researcher will aim to be aware of her role within the construction of reality through regular reflection, and a reflective section has been presented in the discussion chapter.

The paradigms positivism and post-positivism have not been chosen for this study due to their focus on objectivity. Although post-positivism does not believe in true objectivity, it views subjectivity as a weakness (Popper, 1959; Kuhn, 2012), which is not the case within the constructivist paradigm (Kant, 1781; 1785; Potrac, Jones and Nelson, 2014). Pragmatism has not been chosen due to its focus on action to create meaning, as a thought in itself does not hold meaning until it is put into action (Dewey, 1931). This can be explained by returning to the example of a chair. In pragmatism the thought of a chair being useful to sit on is only meaningful once the chair is actually sat on, establishing the truth of the original thought. However, in constructivism these original thoughts are valued and seen as meaningful contributions to individual perceptions of the truth, whether or not they eventually lead to the pragmatic idea of action resulting in an established truth. All these thoughts and ideas seem relevant to exploring assessing older people on a hospital ward to gain an understanding in how the process is perceived by those involved.

### 3.2 Research methodologies

A methodology moves from the philosophical underpinnings towards the more practical process of research. To reach the research aim a research methodology is used to guide the process. Many definitions show the confusion and overlap that has occurred regarding research methodology and research methods. Within this thesis the following definition of research methodology will be used:

*'The branch of philosophy concerned with the science of method and procedure.'*  
(HarperCollins, 2017)

Whereas research methods are defined as:

*'Methods, in contrast, are much more concrete and practical- they are the doing tools for collecting and analyzing data.'* (Giddings and Grant, 2007, p.56)

These definitions show both the difference between methodology and methods, as well as their strong connection. In this section possible methodologies within the constructivist paradigm will be presented after which the chosen methodology for this study will be discussed in-depth. Then the methods will be explained in more detail.

### 3.2.1 Methodologies with a qualitative approach

The aim is to understand perspectives of those involved in the assessment process. Within the constructivist paradigm context is relevant, as the experiences and perceptions of the topic under study cannot be seen independently from the context in which they are constructed. Additionally, these experiences and perspectives are highly subjective and personal to their owners. Therefore, it is important to start data collection with an open mind. To gain further understanding into the perceptions and views of those involved with assessing older people, it seems appropriate to listen to them. This leads to interviewing and observing those who are involved in ward-based assessment of older people. A qualitative approach is therefore best suited for this research as it provides a medium through which experiences and perceptions can be explored within their context.

There are several qualitative methodologies such as narrative research (Van Manen, 1990), action research (Lewin, 1946; Masters, 1995), advocacy research (Kralik and Van Loon, 2008), phenomenology (Husserl, 1931; Heidegger, 1975), ethnography (Atkinson and Hammersley, 2007), case study (Yin, 2003; Stake, 2005), and Grounded Theory (Glaser and Strauss, 1967; Charmaz, 2014). Narrative research focuses on storytelling (Van Manen, 1990). Action research aims to implement change and review this change (Lewin, 1946; Townsend, 2013). Advocacy research includes all studies raising awareness concerning certain issues or people, aiming to evoke social change (Kralik and Van Loon, 2008). As the aim of this thesis focuses on understanding current assessment practice on a ward for older people, these three methodologies seem less suitable. Phenomenology, ethnography, case study, and Grounded Theory are potentially suitable to reach the aim of this study, and these will be discussed in more depth.

#### 3.2.1.1 Phenomenology

Phenomenology is known both as a philosophy and as a methodology. Over the years many well-known thinkers have added their ideas concerning phenomenology, and it is now an often used research methodology in nursing. Nonetheless, even though recent studies claim to use phenomenology it is not always clear in what way they relate to this



complicated philosophical stance, and they do not always mention or describe the differences within phenomenology (Paley, 2002). This section addresses its rich history and development.

The founder of phenomenology is Husserl (1931). He was highly influenced by Brentano (1887) regarding his idea that science is description. This means that to understand a phenomenon from within, it is to be described objectively. This suggests that Husserl, a mathematician, was influenced by positivist beliefs. To develop objectivity, the researcher is to perform *epoche*, also called bracketing or reduction. This process entails the researcher becoming aware of his or her beliefs, values, and prejudices, in order to let them go and creating an open mind to undertake objective observation and description (Husserl, 1931). Therefore, even though qualitative research methods are used, they are operated and viewed in a positivist viewpoint.

Even though Heidegger (1927; 1975) was a student of Husserl, he revolutionised phenomenology in many ways by breaking with some of Husserl's main ideas. Instead of focussing on description (transcendental), Heidegger (1927; 1975) focussed on interpretation (hermeneutic) and broke with Husserl's ideas regarding objectivity, embracing a subjective view of the world. He wrote about '*Dasein*', the being of a person, and how it interacts and creates relationships with the world around it (Heidegger, 1927). Reality of truth can only be known through '*Dasein*'. This means everything is always interpreted by the subjective observer, resulting in an interpretation of a reality or truth (Heidegger, 1927).

Dowling (2007) summarised how many others have contributed to the philosophy, such as Merleau-Ponty and Gadamer. It is interesting that Merleau-Ponty (1945) viewed his phenomenology from a post-positivistic stance, while Gadamer (2004) took a more constructivist approach to it. Gadamer was a student of Heidegger and built his ideas on those of his teacher. New phenomenology, which stands for recent use of phenomenology within science and research and has been developed by, for instance, Crotty (1996) and Van Manen (2007), comes from a pragmatic philosophical approach in which description and interpretation is combined. It aims to understand the experience of the phenomenon, whereas 'old phenomenology' as introduced by Husserl and Heidegger aims to understand the phenomenon itself. New phenomenology has been

used extensively within nursing research to understand the complex experiences of patients and nurses within the world of health care (Dowling, 2007).

The philosophers mentioned above developed the philosophy of phenomenology. Others have developed phenomenological methodologies and have given suggestions on which methods to use in a phenomenological study. Giorgi (1985; 1997; 2000), Moustakas (1994), Colaizzi (1978), and Van Kaam (1966) have introduced ideas relating to descriptive phenomenological methodology as developed by Husserl. Their differences can be found in the validation of results. Where Giorgi bases this on researchers only, Colaizzi (1978) includes participants in this process, and Van Kaam (1966) includes other experts. In all approaches data are to be read and to be organized according to clusters of categories, which lead to a comprehensive description of the phenomenon. Diekelmann, Allen and Tanner (1989) have written about interpretative phenomenological methodology in line with Heidegger's philosophical ideas. Smith published regarding Interpretative Phenomenological Analysis (IPA), in which the aim is to interpret the way participants of the study perceive experiences by focusing on detailed individual events at first and then combine this into a more general understanding (Smith and Osborne, 2015). The difference with the descriptive methods shows in the second analytical step where interpretative summaries are written of the interviews, and the rest of the analysis focuses on these interpretations, whereas in the descriptive phenomenology the focus is on the original text and data. Van Manen (2007) has published his ideas on phenomenology in which description and interpretation is combined, highlighting the importance of writing as part of the process of understanding the data (Van Manen, 2006).

For this thesis, the phenomenological approach was considered to explore the assessment process on a ward for older people. However, purely descriptive phenomenology is not suitable, since this thesis is aiming at understanding current practice. To do this, an interpretation is necessary, which makes an interpretative phenomenology a possible methodology for this thesis.

### *3.2.1.2 Ethnography*

Ethnography has been defined by Harris (1968) as the design in which the researcher aims to study a culture-sharing group and attempts to understand their values, beliefs, and behaviours. This type of research has been used extensively within anthropology, starting

out by studying '*non-Western societies and cultures*' (p.1), and it was then applied to study subcultures such as schools (Atkinson and Hammersley, 1994). In the third edition of their book on ethnography, Atkinson and Hammersley (2007) explain the basics of an ethnographic design. They note it has been influenced by many theoretical ideas such as pragmatism, constructivism and post-modernism. In their description of ethnography these influences become clear. Data collection is unstructured, and several aims can be pursued such as description, explanation, and generating theory (Atkinson and Hammersley, 2007).

Atkinson and Hammersley (2007) note the importance of reflexivity, which refers to the idea that the researcher is part of the world he or she is studying. Researchers have a history, values and ideas, and these colour their observations and thoughts. Therefore, it is suggested to aim for a broad description of the area under study, including emic and etic perspectives, meaning the perspectives of participants and the perspective of the researcher (Van Maanen, 1988). Atkinson and Hammersley (2007) explain that in ethnography data and analytical ideas are constantly in relation to each other. Through this iterative process the aim and scope of the study focus along the way. Themes and concepts will be formed, and patterns will be found within these themes and concepts. Data come mainly from observation and from formal and informal conversations or interviews with participants. However, documents and material artefacts are also possible sources for study.

Although in their book Atkinson and Hammersley (2007) have been focussing on ethnography, they refer to Glaser and Strauss (1967), the founders of Grounded Theory, on many occasions. For instance, when they suggest the use of ethnography to generate theory, the use of theoretical sampling, the difference in formal and substantive theory, and the use of constant comparison. All these features are main aspects of Grounded Theory and will be explained later in this chapter. Nonetheless, it creates a blurry line between ethnography and Grounded Theory, showing overlap between the two methodologies as Atkinson and Hammersley's (2007) suggest using core aspects of Grounded Theory in an ethnographic approach when aiming to generate a theory. A difference, however can be found in the ethnographic focus on culture specifically, whereas this is not necessarily the case in a Grounded Theory.

Regarding the aim of this study, one can argue that the inpatient ward for older people can be seen as a culture. By understanding the culture and the behaviour of those involved concerning assessment, the process can be studied and explored. Ethnography is therefore a reasonable option to be used for this thesis.

#### *3.2.1.3 Case study*

The case study design has been used by scientists such as Stake (1995; 2005), and Yin (2003). Additional contributions have been made by researchers such as Merriam (2009) focussing on research in education, and Denzin and Lincoln (2005). Yin (2003) defined the case study design as:

*'An empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.'* (p.18)

The three authors advocate different approaches seemingly rooted in different paradigms. Where Stake (1995) comes from an interpretive approach, Yin (2003) seems to be rooted in a post-positivist approach in which bias is to be limited and validity and reliability are to be aimed for. The case study design suggests a literature review to define a theoretical framework which can inform data collection. Although data collection and analysis are meant to be iterative, the authors seem to describe it as a consecutive process. They also suggest purposive sampling takes place before data collection. All authors describe the possible use of both qualitative and quantitative data, and explain different types of case studies, for instance single case and multiple case studies. The aim of a case study is also mentioned by all authors and although they might name it differently, they agree that the aim can be exploratory, descriptive, and/or explanatory. Although the authors suggest different steps of analysis, they all aim to find patterns and categories in the data, to describe or explain the phenomenon under study (Stake, 1995; Yin, 2003).

This design could be used for our thesis, where the case under study would be the current assessment practice on a ward for older people. It would allow exploration of the current situation in which the context and the phenomenon can be studied together.

#### *3.2.1.4 Grounded Theory*

Grounded Theory could be used if the aim is to develop a theory grounded in the data, and should therefore move beyond description of what is being researched, to

explanation of a process, action or interaction (Glaser and Strauss, 1967; Strauss and Corbin, 1998). Grounded Theory has been founded by Glaser and Strauss (1967), followed by their individual publications with other authors resulting in different views on Grounded Theory (Bryant and Charmaz, 2007). Glaser and Strauss came from different backgrounds, and it is believed that these influenced their later individual works. In more recent years other scientists such as Charmaz (2014), have developed their own ideas regarding this design, resulting in the following statement by Bryant and Charmaz (2007):

*'At the simplest level, we have the Glaserian school of GTM, the Strauss and Corbin school, and the Constructivist.'* (p.10)

However, others such as Denzin (2007) have established even more distinctive groups within Grounded Theory, which shows the diversity in which Grounded Theory is perceived and used. Nonetheless, all authors suggest a Grounded Theory methodology based on a few main concepts: theory generation, comparative analysis, theoretical sampling, theoretical sensitivity, and theoretical saturation (Glaser and Strauss, 1967; Charmaz, 2014). Within a Grounded Theory study the sampling, recruitment, data collection, and analysis take place simultaneously, creating an iterative process in which they steer one another as a conceptual framework is developed (Glaser and Strauss, 1967; Charmaz 2014). The framework or theory that is aimed for should be a conceptual and abstract understanding of the complexity of the topic under study:

*'The world of social phenomena is bafflingly complex. ... Abstraction (theory) inevitably simplifies, yet to comprehend deeply, to order, some degree of abstraction is necessary.'* (Strauss, 1993, p.12)

Grounded Theory is discussed in-depth in the upcoming sections, including similarities and differences between the three main schools.

Grounded Theory is a design that could be used for this thesis. As explained in the literature review in Chapter 2 the context of the care of older people, as well as assessing older people, are complex. A Grounded Theory study could result in a conceptual framework grounded in the data, allowing for explanation and ordering of the complex topic under study.

### 3.2.2 Methodology for this thesis

In conclusion, four designs seem suitable for the research questions of this thesis. These are interpretative phenomenology, ethnography, case study design and Grounded Theory. All designs can be set in the constructivist paradigm and aim to interpret and understand the subject under study using interviews, observations and other forms of data, such as documents. Due to this number of methodologies that can be used for this thesis, the eventual methodology of choice is not meant to be seen as the only suitable choice, but rather as the most suitable choice.

Grounded Theory was chosen as the methodology to study the aim of exploring the assessment process on a ward for older people. The development of a theory or conceptual framework to explain and understand perceptions on the complex process of assessment within the care of older people, seemed appropriate. Although all four methodologies could be used to generate such a framework, the Grounded Theory design has been developed for this aim specifically. As it is unclear what is to be found in the data with an aim that focuses on exploration, Grounded Theory leaves room for the researcher to follow the findings and the evolving constructed understanding of the topic under study during data collection (Glaser and Strauss, 1967). This is especially visible in how recruitment, data collection and analysis happen simultaneously, one building on the other throughout the process (Glaser and Strauss, 1967; Charmaz, 2014). This freedom seems very useful to keep an open mind and 'listen to the data'.

By choosing Grounded Theory, the other three methodologies will not be used in this study. Within ethnography the generation of a theory or framework is discussed, however when doing this the authors (Atkinson and Hammersley, 2007) refer to the founders of Grounded Theory (Glaser and Strauss, 1967) and repeat their suggestions regarding methodology and methods. Interpretive phenomenology does not have a methodology or methods that are specifically focussed on generating a framework, although they do not specifically rule it out either. Their aim, however, is either comprehensive description or understanding of phenomena and not necessarily the construction of a more abstract conceptual framework or theory to explain the topic under study.

The case study design is also a possibility for this thesis. This design is very useful in evaluating programs, which makes it possible to focus on the process of assessment on a ward for older people. The difference between case studies and Grounded Theory seems

to be most evident in its process. The case study design aims to have a clear plan before data collection including a theoretical framework, questions for interviews, and purposeful sampling (Yin, 2003). The sample in Grounded Theory is built during data collection and analysis which is called theoretical sampling (Glaser and Strauss, 1967). In a case study design the sample is chosen beforehand called purposeful sampling, even though a snowball technique might be used later on during data collection and analysis (Yin, 2003). Nonetheless, a case study design follows a protocol that has been developed beforehand (Yin, 2003), whereas Grounded Theory evolves while it is in progress (Charmaz, 2014).

In conclusion, the Grounded Theory methodology is a suitable fit to focus on the research aim to explore the current assessment process on a ward for older people. In the following section the development of Grounded Theory will be discussed, including the original design by Glaser and Strauss (1967), the positivist Grounded Theory by Glaser (1992; 2004), the pragmatic Grounded Theory by Strauss and Corbin (1998), and the constructivist Grounded Theory by Charmaz (2014).

### 3.3 Grounded Theory

#### 3.3.1 The evolution of Grounded Theory

Glaser and Strauss started their development of Grounded Theory with co-authored publications, 'Awareness of Dying' (Glaser and Strauss, 1965) and the 'Discovery of Grounded Theory' (Glaser and Strauss, 1967). The first is a study based on the Grounded Theory methodology, and the latter is an explanation of the methodology itself.

The authors expressed their opinions regarding the need for theory generating studies based on qualitative methods, next to the theory testing studies that, at the time, were largely done with quantitative methods (Glaser and Strauss, 1967). They argued that the social world can only be studied while being engaged in it, and that much of this social world is still not explained by existing knowledge. They did not dismiss the use of quantitative studies, nor did they suggest that testing theories is unnecessary. However, they did see a need for social scientists to generate theories which aim to understand the social world we live in. Mainly qualitative methods such as observation and interviews are used; however, if the problem requires it, quantitative methods can be used as well. The theory can either be formal or substantive, and in a superficial explanation the substantive theory is less broad in scope than a formal theory. Their first explanation on how to do a

formal theory is very basic and showed the need for further development (Glaser and Strauss, 1967), which has been done by both authors separately in later years (Strauss, 1978; Glaser, 2007).

In the following paragraphs the main concepts, such as constant comparison, theoretical sensitivity, theoretical sampling, and theoretical saturation, will be further addressed and explained.

One of the main aspects of Grounded Theory is constant comparison (Glaser and Strauss, 1967), which aims to continuously compare data with previous data and new ideas, to come to a theory or conceptual framework. This can be done by coding the data into categories, and while adding new data to these categories, the data have to be compared to what has already been coded and analysed. Another main concept is theoretical sensitivity (Glaser and Strauss, 1967) and this involves the ability to have insight into the subject under study and be attuned to the data, its context, the participants, and everything that could bring understanding. Insights can come from everywhere and may occur at any time, and they can be personal, or they can be borrowed from someone else. Therefore, researchers should be creative with their insights and use them while developing the theory or conceptual framework by doing comparative analysis.

Theoretical sampling is used in Grounded Theory to aid theory generation by focussing on those participants that can further inform the theory. Glaser and Strauss (1967) described it as:

*'Theoretical sampling is the process of data collection for generating theory whereby the analyst jointly collects, codes, and analyzes data and decides what to collect next and where to find them, in order to develop the theory as it emerges.'* (p.45)

This definition shows that sampling, data collection and data analysis have to be done at the same time, to collect data that further develop the theory or conceptual framework. Found data are therefore the basis for finding and selecting new data. This process continues until theoretical saturation has been found. This means that no additional data can be found to further develop categories. Nonetheless, a saturated category should be based on wide ranged data (Glaser and Strauss, 1967).

Although the first publication by Glaser and Strauss (1967) explains many aspects of Grounded Theory, some characteristics remain unclear. The authors repeat many times



that the theory will emerge from the data, however the term 'emerging' seems to lead to the thought that the researcher will suddenly see what the data means. Analytical thought is mentioned, but not necessarily as part of 'emerging'. Some ideas are given regarding coding and analysis, but they leave room for researchers to be creative and to shape their research process as needed. Both Glaser and Strauss have further developed their ideas independently leading to different schools of thought (Strauss and Corbin, 1998; Glaser, 2004). And in recent years Charmaz (2014) has added ideas regarding constructivist Grounded Theory. These three different approaches will be discussed next.

#### *3.3.1.1 Glaserian Grounded Theory*

Glaser continued his methodology calling it 'classic Grounded Theory', claiming to represent the methodology as it was originally intended (Glaser, 1992; Glaser, 2004). Glaser feels that other forms of Grounded Theory are just forms of Qualitative Data Analysis (QDA), including the Grounded Theory as it was developed by his previous co-author Strauss. Glaser (2004) identifies a structured approach including data collection and analysis procedures that are simultaneous, sequential, subsequent, scheduled, and serendipitous. Methods used in Glaser's methodology include constant comparison, theoretical sampling, the idea that everything can be considered as data, memoing, open and selective coding, and the use of literature as data instead of using it as informative source before data collection. This means that the literature review should take place at a later stage in the research process, allowing the researcher not to be influenced by existing ideas and instead focus on their data (Glaser, 1992).

Glaser's Grounded Theory is rooted in a positivist approach in which objectivism is the main aim in order to understand the subject under study, and Glaser argues that the researcher is able to objectively observe reality.

*'When I say that some data is interpreted, I mean the participant not only tells what is going on, but tells the researcher how to view it correctly—his/her way. I do not mean that they are mutually built up interpretations. Adding his or her interpretations would be an unwarranted intrusion of the researcher.'* (Glaser, 2002)

Glaser (1992; 2004) believes that most of the process and product of Grounded Theory will emerge along the way. He therefore criticises those who use certain techniques, for instance Strauss and Corbin (1998), which he states is forcing instead of emerging.

Glaser does not really define the term 'emerging', even though it is a key word in all his publications around Grounded Theory. The closest he comes to a definition is:

*'Thus the analyst must pace himself, exercise patience and accept nothing until something happens, as it surely does.'* (Glaser, 2004)

In his writings Glaser (1992; 2004) claims that not only will the theory emerge, but also the categories, theoretical codes, and the best possible interview style, amongst others. This statement leads to thoughts that the theory that is aimed for will miraculously present itself to the researcher, who is waiting for this to happen. However, though he states that the core category will emerge, he further writes that:

*'It takes time and much coding and analysis to verify a core category through saturation, relevance, and workability.'* (Glaser, 2004)

This statement seems to promote an active input from the researcher to develop the theory. Therefore, it seems likely that theory will emerge from the data through effective work from the researcher. And even though Glaser (2004) himself disagreed with May (1994) when she described the effort needing to do qualitative research, stating that it is the opposite of letting the theory emerge, May seems to summarize the efforts that are needed to make sense of data quite comprehensively:

*'Doing qualitative research is not a passive endeavour. Despite current perceptions and student's prayers, theory does not magically emerge from data. Nor is it true that, if only one is patient enough, insight wondrously enlightens the researcher. Rather, data analysis is a process that requires astute questioning, a relentless search for answers, active observation, and accurate recall. It is a process of piecing together data, of making the invisible obvious, of recognizing the significant from the insignificant, of linking seemingly unrelated facts logically, of fitting categories one with another, and of attributing consequences to antecedents. It is a process of conjecture and verification, of correction and modification, of suggestion and defence. It is a creative process of organizing data so that the analytic scheme will appear obvious.'* (May, 1994, p.10)

Even though Glaser might disagree, his description of coding, constant comparison and conceptualizing shows that also in his Grounded Theory the researcher has an active role in generating the theory.

### *3.3.1.2 Grounded Theory by Strauss and Corbin*

In this section the pragmatic Grounded Theory, as developed by Strauss and later in collaboration with Corbin, and eventually continued by Corbin alone, will be discussed. Due to the involvement of two authors this Grounded Theory has developed over time, especially in relation to the philosophical underpinnings. Although Strauss was mainly influenced by pragmatism and symbolic interactionism in particular (Strauss and Corbin, 1998; Corbin and Strauss, 2008; 2015), especially in the early editions certain aspects appeared similar to post-positivist views on aiming for objectivity despite knowing this cannot be reached:

*'Both theory and data analysis involve interpretation, but at least it is interpretation based on systematically carried out inquiry.'* (Strauss and Corbin, 1998, p.10)

In the later editions of their book, Corbin explains being influenced by constructivists, feminists, and postmodernists (Corbin and Strauss, 2008; 2015) and seems to have moved more towards the constructivist views which are also held by Charmaz (2014), which will be addressed later in this chapter. As symbolic interactionism heavily influenced Strauss and subsequently Corbin, this philosophical underpinning will be discussed first.

Symbolic interactionism has been part of the works by pragmatists such as Mead (1938) and Blumer (1969). It assumes an object does not have an intrinsic meaning, but rather that meaning is attributed to it by the person who does something with it. The way people perceive or interpret the meaning of something influences the way they act towards it (Blumer, 1969; Puddephatt, 2009). Social interaction is key to the process of attributing meaning (Blumer, 1969). Charmaz (2014) summarises it as follows:

*'Interaction is crucial. Interpretation and action arise from interaction.'* (p.265)

Therefore, social interaction and communication lead to an interpreted meaning, which lead people to act in a certain way. To understand action, it is thus relevant to understand the interpreted meaning and the interaction related to it. The key role of interaction links with the ideas that experiences are perceived as an interrelated phenomena in a shared world (Hammersley, 1989). Giving meaning to and interpreting the reality of this shared world is key to symbolic interactionism, and social processes built around communication and interaction are the way to do this. This provides a foundation for Grounded Theory as this methodology aims to understand social processes and give meaning to reality by

understanding how it is perceived by the participants. In addition, the methods are usually qualitative and therefore develop around and build on interaction. The activity of coding data also fits with symbolic interactionism as a way to attribute meaning to it:

*'Defining, labelling, and naming are ways in which we understand situations. ... Naming constitutes a way of knowing, categorizing, locating, evaluating and dealing with an object, event, individual, or group.'* (Charmaz, 2014, p.272)

Grounded Theory as developed by Corbin and Strauss is described in several editions by these two authors, and in their most recent one they note how the differences between the editions focus on creating clarity through expansion, rewriting and re-organising sections of the book (Corbin and Strauss, 2015).

Grounded Theory is meant to generate a theory or conceptual framework, and Strauss and Corbin (1998) defined a theory as:

*'A set of well-developed concepts related through statements of relationship, which together constitute an integrated framework that can be used to explain or predict phenomena.'* (p.15)

Sampling, data collection and analysis are done simultaneously. Theoretical sampling (Corbin and Strauss, 2015) is a characteristic of Grounded Theory and, as explained before, means that the choice for recruiting certain participants is based on findings up to that point. This sampling technique is therefore based on comparisons and asking questions. Once theoretical saturation occurs, which means new data do not provide new information in regard to the theory, the data collection can be stopped (Corbin and Strauss, 2015).

Strauss and Corbin (1998) highlight the possibility of using both quantitative and qualitative methods throughout the whole research process. However, in their later editions (Corbin and Strauss 2008; 2015) they describe Grounded Theory as a qualitative methodology and focus their strategies and methods towards qualitative data only. They continue the view that data can come in many forms, such as interviews, observations, memos, questionnaires, and documents.

The use of literature has many different aims and purposes according to Corbin and Strauss (2015). In an earlier edition they (Strauss and Corbin, 1998) quote Dey (1993) who said:

*'In short, there is a difference between an open mind and an empty head. ... The issue is not whether to use existing knowledge, but how.'* (p.63)

Therefore, literature can be read before data collection is started, it can be part of data collection, it can be used during the analysis or as part of the analysis, and it can be used after analysis to compare results to those stated in the literature (Strauss and Corbin, 1998). In the most recent edition Corbin appears to suggest minimising the use of literature at least until data collection has started, to be more open to what the data are suggesting (Corbin and Strauss, 2015). However, it is up to the researcher to make their own decisions regarding their use of the literature and it should aid the aim of developing sensitivity, which they define as:

*'Sensitivity stands in contrast to objectivity. It means having insight as well as being tuned in to and being able to pick up on relevant issues, events, and happenings during collection and analysis of data.'* (Corbin and Strauss, 2015, p.78)

In this new edition published in 2015, a shift appears to have happened. They still aimed for something they called objectivity in a previous edition (Strauss and Corbin, 1998). This was defined around the researchers' ability to represent the participants as accurately as possible, whilst understanding one's own experiences and values. This definition was confusing as it showed that the researcher was seen as someone who had his or her own perception of reality, influenced by personal experiences, and could therefore never be completely objective. The definition of objectivity was therefore an unusual one which could also be used to define a certain level of subjectivity. In the newer editions this idea of objectivity is no longer included, and instead the focus is on sensitivity. Sensitivity focuses on researchers trying to understand their participants by walking in their shoes (Corbin and Strauss, 2015)

Corbin and Strauss (2015) make suggestions on how data analysis could be undertaken. However, they mention several times that these are merely suggestions, and each researcher should use these creatively and as required by their own research. Nonetheless, asking questions and making constant comparisons should be the

cornerstones of every analysis within Grounded Theory (Corbin and Strauss, 2015). They suggest the use of a technique called microanalysis, which means analysing relevant and interesting data line by line (such as interviews, documents, and notes) and the researcher is supposed to 'listen to the data' and 'let it speak'. That way, categories will appear, as well as hypotheses, regarding the relation of concepts and categories through constant comparisons (Corbin and Strauss, 2015). These comparisons are made between data from one respondent, data from several respondents, and data from the researcher such as notes, assumptions, and interpretations, as well as previously accumulated knowledge. This microanalysis should be done at the beginning of the analysis to establish categories. Once these have emerged, the analysis could focus on these categories. The appearance of categories in the data can be established through coding. Originally, Strauss and Corbin (1998) suggest three types of coding: open, axial, and selective coding, however they remind their reader once again of the dynamic and fluid process that Grounded Theory is supposed to be. These three processes have been described by Strauss and Corbin (1998):

*'In open coding, the analyst is concerned with generating categories and their properties and then seeks to determine how categories vary dimensionally. In axial coding, categories are systematically developed and linked with subcategories. ... Selective coding is the process of integrating and refining categories.'* (p.143)

In the newest edition Corbin suggests dividing analysis into the key elements for teaching purposes, and the initial three coding methods seem to have been changed into the following concepts: "concept identification", "concept elaboration", "analysing data for context", "bring process into analysis", and "integrating categories" (Corbin and Strauss, 2015).

Corbin and Strauss (2015) identify three outcomes of grounded theory, which are description, conceptual ordering, and theory. Whereas description is a clear term, conceptual ordering means organising the data into themes which have been found through coding. Theorizing is explained as a next step in analysis where these themes are integrated into a theoretical scheme in which the process under study, the why, where, when, and how, are explained. This happens through constant interaction between the researcher and his or her data.

Overall, the approach by Strauss and Corbin seems to provide more structure and the use of more techniques than Glaser's Grounded Theory, which aims to let the theory emerge.

### 3.3.1.3 Constructivist Grounded Theory by Charmaz

Regarding the philosophical underpinnings, Charmaz (2014) builds on constructivist beliefs around subjectivity and context. She believes that everyone constructs their own perception on reality resulting in the existence of multiple truths, and that nothing can be separated from its context as this contributes to the constructed reality:

*'We construct our grounded theories through our past and present involvements and interactions with people, perspectives, and research practices. My approach explicitly assumes that any theoretical rendering offers an interpretative portrayal of the studied world, not an exact picture of it.'* (Charmaz, 2014, p.17)

This places her far away from Glaser (2002), who builds on positivist beliefs of objectivity and absolute truths. A quote from Glaser in section 3.3.1.1 mentioned that interpretation is unwanted within Grounded Theory, whereas Charmaz explains this to be the very aim of her research. With this constructivist stance Charmaz (2014) appears closer to the current philosophical underpinnings of Corbin and Strauss (2015), see also section 3.3.2.

Charmaz (2014) does not only add to the methodological discussion, she also explains crucial elements of Grounded Theory by Glaser and Strauss and Corbin. Therefore, it is not always entirely clear which practical approach she suggests, and it seems she leaves room for researchers to find their own strategies. Charmaz (2014) argues for leaving room for creativity as does Glaser, and also suggests possible strategies which, if followed step-by-step, seem similar to the approach by Strauss and Corbin. The basic Grounded Theory methods such as theoretical sampling, constant comparison and theoretical saturation are all mentioned by Charmaz (2014) as a crucial part of her methodology. As these have been discussed previously, they will not be further elaborated on here.

Similar to the other schools of Grounded Theory, the use of literature before data collection is cautioned as the researcher should be able to remain open minded towards the data. Nonetheless, Charmaz (2014) also states that many grounded theorists argue that being completely unfamiliar with relevant literature is also not realistic within the world of academia. Therefore, purposeful decision making on when and how to use the literature is urged (Charmaz, 2014).

The coding procedure suggested by Charmaz (2014) is a two-step approach which she labelled “initial coding” and “focused coding”. Initial coding has been described by Charmaz (2014) as follows:

*‘Initial codes are provisional, comparative, and grounded in the data. They are provisional because you aim to remain open to their analytic possibilities and create codes that best fit the data you have. You progressively follow up on codes that indicate that they fit the data. Then you gather data to explore and fill out these codes.’ (p.117)*

Charmaz (2014) also gives a clear definition of focused coding as the next step after initial coding:

*‘Focused coding means using the most significant and/or frequent earlier codes to sift through and analyze large amounts of data. Focused coding requires decisions about which initial codes make the most analytic sense to categorize your data incisively and completely.’ (p.138)*

The overall impression is that, compared to Corbin and Strauss (2015), Charmaz appears to present her ideas with more room for flexibility and creativity. Her writing and tone constantly affirms the reader should make their own choices based on the purpose and context of their own study.

Besides Glaser critiquing Charmaz’s ideas, others have also discussed her constructivist Grounded Theory. Damalis (2012) and Strübing (2007) point to the pragmatic approach by Strauss and Corbin. They wonder why Charmaz questioned these pragmatic underpinnings when she pointed to objectivism in not only Glaser’s approach, but also in the approach by Corbin and Strauss (2015). Charmaz (2006) argues how interpretation is seen as a weakness in Strauss and Corbin’s methodology, while within constructivism it is a strength. Strübing (2007) noted that Charmaz’s approach is very similar to Strauss and Corbin even though Charmaz might not agree with this. In addition, critique has been voiced on the way constructivist Grounded Theory has moved away from the original Grounded Theory developed by its founders (Glaser, 2007; Bryant, 2009; Breckenridge, et al., 2012; Damalis, 2012), suggesting that, although the methodology of Charmaz is useful, it has changed beyond what can be named Grounded Theory.



### 3.3.2 The three Grounded Theory approaches discussed

The three main streams in Grounded Theory show similarities as well as differences. Similarities between the methodologies suggested by the different authors can be found in the need for certain strategies, which were already introduced by Glaser and Strauss (1967) in their first publication on Grounded Theory as a methodology. This includes theoretical sampling and saturation, memoing, constant comparative methods, coding (although the way of coding differs between all authors), and theoretical sensitivity (Glaser and Strauss, 1967; Glaser, 1978; Strauss and Corbin, 1998; Charmaz, 2014; Corbin and Strauss, 2015).

The key difference between the three schools of thought within Grounded Theory is related to the philosophical underpinnings. Glaser (2002) comes from a positivist point of view, focusing on an absolute truth and rejecting interpretations as a part of research. Glaser has held true to this paradigm over the years (Charmaz, 2014). The earlier Strauss and Corbin (1998) seemed rooted mainly in symbolic interactionism, as well as accepting their subjectivity, but aiming to limit it in order to discover knowledge. Corbin, however, stated she was influenced by constructivism, feminism, and postmodernism (Corbin and Strauss, 2008; 2015). Therefore, the post-positivist view appears to have changed in the later editions where Corbin accepts constructive interpretation as a valuable way to understand the world (Corbin and Strauss, 2015), which seems closer to the views held by Charmaz (2014). Charmaz (2006; 2014) has published two editions of her constructivist Grounded Theory and, although she claimed the influence of symbolic interactionism in the first edition, her focus was primarily on constructivism as the paradigm underpinning her methodology. At the time of designing the study presented in this thesis, the first edition was used as a reference. Just before data collection started the second edition came out, and this was used from then onwards. In the second edition a full chapter has been added regarding symbolic interactionism in relation to constructivist Grounded Theory (Charmaz, 2014). Therefore, Corbin and Charmaz appear to have moved towards one another, Corbin being influenced by constructivism and Charmaz by symbolic interactionism. Both believe interaction leads to construction of a theory and both feel interpretations of the world can help to understand it (Charmaz, 2014; Corbin and Strauss, 2015).

As Glaser holds the positivist stance that reality is 'finished' and is to be observed by the researcher, he does not believe in a constructed reality and a constructed understanding of this reality, but instead builds around the idea that the theory and everything this entails will emerge from the data (Glaser, 1992). Therefore, Glaser disagrees with Strauss and Corbin regarding their three types of coding, which Glaser believes is forcing the theory out of the data, instead of letting it emerge (Glaser, 1992). The last coding stage by Strauss and Corbin, axial coding, aims for a rich description of the categories and their properties, which makes Glaser wonder whether the end product is only a description and not a theory in which connections between categories are made at an abstract level. Glaser therefore suggests two coding strategies, one to find the categories called substantive coding, and one to link the categories called theoretical coding, and with that he leaves more room for creativity by the researcher (Glaser, 1978). Charmaz (2014) also presents two coding steps, which seem similar to those by Glaser. However, Strauss and Corbin do state regularly that their suggestions on coding are just that, suggestions, and the researcher is allowed to use or ignore these if this will enhance their process of theory generation (Corbin and Strauss, 2008).

The emergence approach by Glaser (2002), which was explained earlier, has not been chosen for this study, as the researcher agrees with May (1994) that analysis is an active process between the researcher and the data. In addition, the focus on objectivity has been rejected earlier when deciding on the philosophical underpinnings for this study. The suggestions made by Corbin and Strauss (2015) regarding data collection and analysis, seemed too structured and rigid for a research process in which exploration of the topic is the aim. Therefore, a more flexible approach seemed more in line with this aim of exploration, as it leaves room for the researcher to respond to the process, the data, and the findings.

*'Constructivist grounded theory highlights the flexibility of the methods and resists mechanical application of it.'* (Charmaz, 2014, p.12)

Therefore, Charmaz's approach has been chosen as it aims to 'let the data speak', without focussing entirely on emergence. Instead, the researcher is encouraged to find ways to actively engage with the data to construct a theory or conceptual framework. In addition, the choice of Charmaz's constructivist Grounded Theory was made because she aims for the researcher's interpretation of a constructed reality, and argues the existence of

multiple truths based on people constructing their perceptions on reality founded on their values, experiences and beliefs (Charmaz, 2014). This stance allows the researcher to value each participant's perception on assessing older people, whilst developing a conceptual framework regarding the assessment process on a ward for older people.

### 3.4 Rigour and limitations

With the choice of constructivist Grounded Theory as the methodology for this thesis, the focus now moves towards the evaluation of rigour and limitations of this methodology. The general criteria to evaluate these aspects of a study will be described, which has been used as a basis for the discussion regarding the rigour of this study (Chapter 5).

#### 3.4.1 Criteria for the evaluation of rigour in Grounded Theory research

While the rigour of quantitative research design is evaluated using reliability, validity, and generalisability (Winter, 2000), for qualitative designs trustworthiness and authenticity have been suggested to be the main criteria to evaluate its quality (Guba and Lincoln, 1994). Additionally, some methodologists have provided evaluation criteria for 'their' methodology in particular. In this section the criteria by Guba and Lincoln for qualitative research in general, as well as the specific criteria by Charmaz (2014) for constructivist Grounded Theory will be discussed.

Lincoln and Guba (1985) suggested the use of trustworthiness to evaluate qualitative research, which contains four items: transferability, credibility, dependability and confirmability. Trustworthiness focuses on the worth of the research (Lincoln and Guba, 1985). A few years later, when doing a fourth generation evaluation (Guba and Lincoln, 1989), they added to these the criteria of authenticity: fairness, ontological authenticity, educative authenticity, catalytic authenticity, and tactical authenticity. Authenticity focuses on the degree of fair representation of different realities as perceived by the participants of the study (Guba and Lincoln, 1989). As fourth generation research aims to evaluate a process with stakeholders, find consensus between stakeholders, and make an agenda to enhance what is being evaluated, catalytic and tactical authenticity are aimed at changing practice and evaluating this change (Guba and Lincoln, 1989). As the aim of this thesis was to understand practice rather than change it, catalytic authenticity and tactical authenticity are beyond the scope of this thesis. All other criteria, however, are relevant to evaluating the rigour of a constructivist Grounded Theory study. Therefore, an

overview of these criteria will be given, as well as optional techniques to enhance the rigour of a research study.

Trustworthiness includes four criteria (Lincoln and Guba, 1985):

- Credibility looks at whether the findings match the constructed realities of the participants, and this can be enhanced by, for instance, member checks, prolonged data collection, and triangulation of data.
- Transferability has to do with the reader being able to interpret the findings in relation to the extent of their transferability to other situations. This can be enhanced through, for instance, thick description of the context, participants, and the research process.
- Dependability focuses on the quality of the methodology, and can be enhanced by adhering to the suggested characteristics of the chosen methodology and providing a clear and in-depth description of the research process and methods used.
- Confirmability ensures the findings are based on the data. This can be strengthened by providing logical interpretations, as well as referring to the data and using quotations.

The first three criteria of authenticity views (Guba and Lincoln, 1989) are also relevant in relation to this study:

- Fairness focuses on the degree to which different views and perceptions are presented within the process. This can be strengthened through data collection over a long period and identifying different perceptions on the topic under study.
- Ontological authenticity includes how perceptions and views of participants evolve and develop over time. This can be enhanced via testimonies of participants throughout the process.
- Educative authenticity looks at participants appreciating and understanding each other's perceptions, which can be strengthened via evaluations throughout the research process.

These criteria are developed as being parallel to the criteria for quantitative research (Lincoln and Guba, 1985; Guba and Lincoln, 1989; 1994). However, the authors do explain the constructivist basis for the criteria, and therefore place these constructivist criteria opposite the positivist criteria (Guba and Lincoln, 1989). Nonetheless, there is a quest for

terms that are not necessarily related and linked to those used for quantitative research, but are developed independently within their own philosophical paradigms (Whittemore, Chase and Mandle, 2001; Fossey, et al., 2002). This, however, seems to disregard the explanation given by Guba and Lincoln (1989) concerning the constructivist basis for the development of their criteria.

Guba and Lincoln are not the only publishers of criteria for qualitative research, and Creswell (2013) and Whittemore, Chase and Mandle (2001) published an overview with a number of publications, each with different criteria for qualitative research. Nonetheless, the criteria by Guba and Lincoln seem to be the most used throughout the years (Whittemore, Chase and Mandle, 2001). However, their lists are sometimes represented in different ways, for instance by Holloway and Wheeler (2002) when they list trustworthiness and authenticity as other criteria instead of umbrellas for the other criteria, and by giving just a selection of sub criteria identified by Guba and Lincoln.

Glaser, Strauss and Corbin, and Charmaz have all published criteria to evaluate the quality of Grounded Theory research. Since this thesis will follow Charmaz, it seems useful to compare her criteria with those by Guba and Lincoln (1989). The criteria by Charmaz (2014) have been developed from the constructivist paradigm, and include the terms credibility, originality, resonance, and usefulness, which partly overlap with Guba and Lincoln (1989). Charmaz (2014) focuses many items towards the analytical process and how the findings resound with the participants' perceptions, which Lincoln and Guba (1985) covered in the criteria of credibility and confirmability. The main difference is that Charmaz (2014) includes the usefulness and original contribution of the study, whereas Lincoln and Guba (1985) focus mainly on the process and product.

To evaluate the rigour of this study in the discussion chapter, the criteria from Guba and Lincoln (1989) will be used. This is based on an aim for continuity and clarity, as the use of one set of criteria within all academia makes it easier to compare and relate the quality of studies and the thoroughness of how it has been reported. Guba and Lincoln (1994) are mostly used in the literature and therefore provide this continuity. However, the additional foci of Charmaz (2014) on the originality of the research and the usefulness of the findings in everyday practice are also relevant and will therefore also be reviewed in the discussion chapter.

### 3.4.2 Limitations of Grounded Theory

A limitation of Grounded Theory is the time needed to conduct the study (Lincoln and Guba, 1985). Data collection and data analysis require extended time in the field and beyond, and to 'let the data speak' it cannot be rushed. Another limitation could be access that is needed to conduct the study. Access is needed for an extended period to collect the data, and when analysis shows that additional data are needed the researcher needs to be able to go back into the field. Therefore, a certain loyalty is necessary from the site where the research takes place. Participants ideally would respect the time that is needed, and accept and understand the potential difficulty with presenting a time schedule in advance (Lincoln and Guba, 1985). In addition, using the constructivist paradigm will generate a number of realities that are formed through interpretation and construction by those involved, the researcher might fail to look beyond his or her own construction and interpretation of reality. In that case, the voice of the participant is not represented properly, and the researcher's personal view is emphasised, whereas the aim is to understand the participants' perceptions. Therefore, the researcher needs to be aware of his or her own interpretation of reality, as well as of his or her role in constructing reality. The researcher requires an open mind to understand the perspectives of the participants. The idea that reality is interpretive and constructed, and therefore subjective, is not a limitation in itself (Charmaz, 2014), however a lack of open mind might result in a limited representation of the realities constructed by the participants. Lastly, although the flexibility of the research methodology is seen as a strength by its users, if used inappropriately it can lead to a lack of methodological strength and therefore a lack of quality (Bryant, 2002).

## 3.5 Methods

### 3.5.1 Setting

At the start of the study, with the focus on CGAs, the researcher aimed to look for a ward using a CGA approach to assessment. However, the literature showed inconsistency regarding its effects. In line with this, the researcher was unable to identify a ward where CGA was undertaken according to the full characteristics as mentioned by Wieland and Hirth (2003). The research question evolved to focus on how assessment was undertaken in daily practice on ward for older people and one ward at an NHS University Hospital in the UK focusing on the care of older people was included. This ward has the capacity of 42 beds, and is divided into four separate areas, three with twelve beds and one with six

beds. One twelve bedded area is designated for 'frail older people', such as those with severe dementia or patients who are at high risk of falling. However, given its speciality in the care of older people the ward often admits patients presenting with different stages of cognitive impairment or complex frailty, which means they are present in all four areas of the ward. Professionals working on this ward have not received designated advanced training regarding the care of older people, geriatrics and gerontology. Several specialist nurses are attached to the ward and provide support and teaching when needed. Each area contains different combinations of bays and side rooms. In total there are ten side rooms, five four bedded bays, and two six bedded bays. Each area is staffed by a junior doctor and at least one nurse and one Health Care Assistant (HCA). Depending on the number of patients and their dependency nurses or HCAs are added to the areas staff mix. One or two senior nurses oversee the whole ward, and senior physicians and all therapists review patients in all areas. Activity coordinators are undertaking activities with the patients in an activity room as well as at the bedside each weekday both mornings and afternoons.

Each area has a main corridor where a nurses' station is situated. This means there is a desk with one computer, a telephone, and two chairs. Behind the desk the medical and nursing notes are kept in trolleys. Windows allow a vision into the patient bays from this desk area, although not every patient is visible from there due to the angle or due to curtains being drawn around other patients at certain times. The bays contain four or six beds, each equipped with a bedside table and a night stand in which the patient can store clothes and toiletries. A table with chairs is in a corner of each bay, sometimes used by HCAs when filling in the bedside folder paperwork, or the chairs are used by relatives when they visit.

A small desk can be found at the entrance of the ward where the receptionist is stationed. The manager's main office is near the centre of the ward, and both the manager and the senior nurses who are coordinating the shift are stationed in here. Usually the door is open, unless it is purposefully closed in relation to confidential conversation in the office. Other small offices are in the two most opposite corners of the bays, and are used by professionals for a variety of purposes, such as rostering, documentation and course related activities.

### 3.5.2 Sample

All professionals working on the ward and part of the multi-disciplinary team providing patient care were potential participants for inclusion in the study. This included a variety of disciplines such as registered nurses, HCAs, physicians, and therapists. Agency staff were excluded as they were less familiar with the ward and their practice. All patients admitted to the ward were also potential participants, although those with cognitive impairment and who were unable to give consent, were excluded as advised by the ethics committee. Additionally, patients who received end of life care were excluded. Given the research question of the study it seemed inappropriate and unnecessary to include this patient group, as those not yet at this stage could provide insight into assessment practice on the ward. The data gained from professionals do include insights into assessing those with and those without cognitive impairment, as a large number of patients admitted to the ward have a certain level of cognitive impairment. The patient data however, presented only the view of patients without cognitive impairment.

### 3.5.3 Sampling

Sampling was initially intended to be conducted using the strategy suggested by all grounded theorists. This technique is theoretical sampling and has been defined as:

*'The process of data collection for generating theory whereby the analyst jointly collects, codes, and analyzes data and decides what to collect next and where to find them, in order to develop the theory as it emerges.'* (Glaser and Strauss, 1967, p.45)

However, during the study three different kinds of sampling were used. Sampling professionals started with a purposive approach (Coyne, 1997). This means certain professionals were asked to take part due to their experience on the ward and their role in relation to assessment practice, to provide a starting point for data analysis. Soon after the first data were collected, this was analysed and coded. From then onwards the theoretical sampling strategy was used to enhance the developing framework and its categories. Through observation, interviews, a focus group, and document reviews of medical and nursing notes, which will be further explained at a later stage in this methods section, participants for further observation and interviewing were selected and approached. For instance, additional HCAs were recruited when their use of informal assessment came through in the data. Analysis took place simultaneously with data collection, which meant findings and analytical thoughts directed and steered the study



and the focus towards certain health professionals, patients or situations. For instance, observation in the bay was moved to observation around the professionals' desk in the corridor due to the preliminary findings around assessment practice on the ward.

Sampling patients was done according to a convenience approach (Suri, 2011). This was due to the number of patients admitted to the ward who were unable to take part as they presented with cognitive impairment. As the number of patients who could be approached was relatively low, and not every patient who was approached was willing or able to participate, which will be further explained at the start of the next chapter, a convenience sampling strategy was used.

### 3.5.4 Saturation

It was intended to end sampling and recruitment when new data did not provide new information towards the developed theory, also called theoretical saturation:

*'Categories are 'saturated' when gathering fresh data no longer sparks new theoretical insights, nor reveals new properties of these core theoretical categories.'* (Charmaz, 2014, p.213)

Despite the difficulty with theoretical sampling in relation to patient recruitment, theoretical saturation did steer the continuation and the discontinuation of data collection with both patient and professional participants (Charmaz, 2014). Originally the researcher suggested needing twenty to forty interviews with patients to reach saturation (Marshall, et al., 2013; Charmaz, 2014). However, literature on this topic has mentioned the difficulty of establishing a number in advance as the data should guide this process (Baker and Edwards, 2012; Charmaz, 2014). As after twelve patient interviews the data appeared saturated, another three interviews were conducted. It was then decided that saturation had been reached and further patient interviews were not necessary. Regarding recruitment of professionals for interviews, saturation was expected within twenty to thirty interviews (Marshall, et al., 2013; Charmaz, 2014). After eighteen interviews the researcher felt saturation seemed to be reached. Another four interviews were conducted to make sure no additional concepts were found that could add to the developing codes.

Regarding observation, the researcher originally felt up to two hundred hours would be sufficient to reach saturation (Sørensen, et al., 2013). This was suggested at a time when

it was not clear what the observation data would present. In light of the emerging findings around the importance of informal and invisible assessment, observation at the patient's bedside was found to be less informative than assumed before the start of data collection. As advised by Charmaz (2014) the researcher reviewed the methods used to collect data. It was decided to move the observation sessions to the desk areas and offices where professionals worked together, usually out of view from the patients. During observation sessions the researcher asked professionals about their thought processes as they were working, aiming to understand not only the obvious activities. When saturation seemed to appear in the data, two more sessions around the desk area were undertaken as well as another session with a patient. Document reviews added relevant information of formal assessments and were therefore carried out for each included patient (N=18). As the data appeared "*rich and sufficient*" (Charmaz, 2014, p.33), for the purpose of this study, it was decided to focus on developing the analysis further. The possibility to return to the field to continue with data collection was left open at all times, and connections with professionals in the field were continued until analysis was finished.

The recruitment strategy and the process for gaining consent from the participants is discussed later in this chapter as part of the ethical considerations of this study.

### 3.5.5 Data collection

In the following section the data collection methods and their aims will be further discussed and explained.

#### 3.5.5.1 Observation

As explained earlier, within this study the context of the assessment process is seen as an important aspect of it. Observation was one of the methods used to gather data regarding the assessment process and its context, as:

*'The way people move, dress, interact and use space is very much a part of how particular social settings are constructed. Observation is the key method for collecting data about such matters.'* (Mulhall, 2002, p.307)

During observation the focus was on assessment practice, including communication between professionals and patients who had consented to be observed in this study, as well as communication processes between those professionals. Pretzlik (1994) identified two types of observation, structured and unstructured, and in this study an unstructured

approach was used to allow for exploration of the topic. This meant the researcher went into the observation sessions with an open mind, gathering any information that could be relevant to gaining further insight into the assessment process, without a predetermined focus on certain specific behaviours (Pretzlik, 1994; Mulhall, 2002).

As the care of older people is a team oriented environment, it seemed important for the researcher to participate when needed to become a part of that team to establish rapport. Therefore, the role of observer as participant was anticipated (Gold, 1958), for instance, assisting a carer with positioning a fully dependent patient or in walking a patient to the toilet to prevent a fall. Both professionals and patients seemed to appreciate that the researcher was still active as a registered nurse. Especially with professionals it seemed to develop rapport and a bond of understanding which seemed to enhance recruitment as well as openness during interviews and observation sessions.

Observation sessions with a patient meant the researcher sat near the patient's bed to observe bedside care. However, the interview and observation data pointed towards the activity around the nurses' station outside the bay area and the importance of nurse handovers and board rounds. Therefore, sessions were undertaken around the nurses' station and the researcher attended a few board rounds and nurse handovers.

To enhance analysis, the researcher kept field notes, also called descriptive notes (DeWalt and DeWalt, 2011). These included detailed descriptions of observations and informal conversations during observation sessions, notes after document reviews, and reflexive notes throughout the research process. These notes were used when data were analysed.

During observation, informal conversations were held with the participants. This was different from formal interviews which are purposefully organised, whereas an informal conversation took place more casually (DeWalt and DeWalt, 2011). Notes were written shortly after the conversations took place, with the consent of the participants.

#### *3.5.5.2 Interviews*

The researcher interviewed consenting patients and HCPs. An interview can be conducted in different styles, from a structured to an unstructured interview (Wengraf, 2001; Rubin and Rubin, 2005). Since the focus was on the assessment process, some structure while interviewing seemed appropriate. However, theory generation requires minimal structure to let data appear (Wengraf, 2001). Therefore, a lightly structured approach was

followed in this study, and a limited number of open questions to focus the interview towards this topic were used (Charmaz, 2014). During the interviews probes and follow-up questions were used (Rubin and Rubin, 2005). As the experience of the researcher grew and the emergence of codes in the data continued, the interviews became more free flowing as they were shaped around a few main questions or topics (Appendix 3). The researcher aimed to let the participant steer the interview, while keeping in mind the aims of the study.

All interviews with professionals, as well as the focus group were digitally recorded and transcribed verbatim. Two of the fifteen patient interviews were not digitally recorded due to (1) a patient being only able to whisper which was not picked up by the recorder, and (2) an interview during a particular busy time on the ward with confidential conversations taking place between professionals and patients who had not consented to recording. Instead the researcher wrote notes during these interviews and extensive notes immediately after the interview had finished. The other thirteen interviews with patients were digitally recorded and transcribed verbatim.

Before data collection the researcher attended relevant courses on interviewing techniques, and practiced and discussed interviewing with her supervisors (King and Horrocks, 2010). The researcher aimed to keep an open mind to all data, and both supervision and reflection were used to aid this process.

#### *3.5.5.3 Focus group*

A focus group was held with HCPs from the ward after data collection had finished and analysis was ongoing. During the focus group the preliminary findings were presented, and members of the group were able to discuss these, aiming to gain further data on the themes that developed during analysis up to that point (Charmaz, 2014). In addition, the focus group was an opportunity to explore whether the findings were resonating with the participants' perceptions (Guba and Lincoln, 1989). The assessment process was found to be multi-disciplinary, and the participants were from a number of professional disciplines, allowing for a multi-disciplinary discussion. Interaction between the participants was encouraged, as the researcher aimed to give each participant equal opportunity to speak openly and contribute to the discussion (King and Horrocks, 2010).

The supporting document for the focus group can be found in Appendix 4. The focus group was digitally recorded and transcribed verbatim. This was coded and linked to the

categories of the evolving framework. The attended courses on interviewing techniques also included collecting data via a focus group.

#### *3.5.5.4 Document review*

The patients, who consented to participate in the study, were also asked if the researcher could review their medical and nursing notes. For document review the patient's medical and nursing notes were screened using a prompt list (See Appendix 5). This list provided prompts for the researcher around the areas to focus on when looking through the notes and was used to write extensive reflections on the notes that were reviewed. The main aim was to understand the use and role of documentation in relation to the assessment process. Over time a few points were added to the lists which emerged during the study as a relevant aspect of assessment practice on the ward. Document reviews were conducted throughout the full period of data collection, which provided an opportunity to monitor any changes to documentation during this period.

#### *3.5.6 Data analysis*

The interviews resulted in both verbatim transcripts and additional notes. Observation sessions and document reviews resulted in extensive notes, which were usually written within 24 hours of the data collection. Reflective notes, as well as methodological and analytical notes, were written throughout the data collection period of twelve months, and continued through the analysis of data afterwards. All these data were used for analysis.

The process of coding was based on the principles of data analysis according to Constructivist Grounded Theory (Charmaz, 2014). As this has been addressed in depth earlier the different terms and techniques will not be elaborated on in this section. Within the analysis process the researcher utilised constant comparison (Glaser and Strauss, 1967; Charmaz, 2014), for instance by comparing interviews with interviews, interviews with observation data, excerpts of data within a certain code of between codes, comparing data within a professional discipline and between disciplines, and comparing patients' data with professionals' data.

Coding was conducted using two stages, initial coding and focused coding (Charmaz, 2014), see also section 3.3.1.3. The aim of coding is to:

*'Connect by categorizing.'* (Dey, 2007, p.178)

Thus, categorizing was used to connect the categories together. When new categories appeared during analysis, previous data were reread and coded into the new category as appropriate (Strauss and Corbin, 1998; Charmaz, 2014). As the data set grew and the analysis continued the researcher added, renamed, and combined initial codes. A more focused approach to coding ensued and initial codes were grouped and linked under focused codes. By reading and rereading the data, both within each code, as well as in its original context, the codes were then grouped and linked under themes. The core category emerged as the researcher thought about a link between the themes. The core category and themes were checked with the data, to ensure it was grounded in the data. Throughout the process of recruitment, data collection, and analysis regular supervisory meetings were used to discuss these stages.

To aid the coding process gerunds were used to label categories and codes, as advised by Charmaz (2014). These focus on the processes and action within the data, which provided an excellent fit with the topic under study. Throughout the analysis process the researcher's creativity was encouraged in which the researcher learnt what did and did not work for her personally (Charmaz, 2014). During the analysis process the data were read many times in different sequences to make sure the findings would be grounded in the data.

All data were uploaded into NVIVO10, which is software to store, code and categorize the data. Analysis was conducted by the researcher who used the software to manage the data.

### 3.5.7 Theoretical sensitivity

Theoretical sensitivity (Glaser, 1978; Charmaz, 2014; Corbin and Strauss, 2015) focuses on the researcher's ability to have insight into the meanings conveyed within the data. The researcher used her experience as a nurse, as well as her evolving analytical research skills and knowledge to enhance her theoretical sensitivity.

The decision was made to conduct a review of the literature prior to data collection, even though some authors suggest to do this at a later stage as to focus on the data and its message, without focusing on concepts and ideas from the literature (Glaser, 2002; Corbin and Strauss, 2015). However, others have given several reasons to conduct the reviews prior to data collection (Dey, 1993; Dunne, 2011), including the need to be innovative when conducting research, for which it is necessary to be aware of current findings.

Knowledge of the current findings will give the researcher an aid to sharpen the focus of the study and to place it into the wider field of research. It can also enhance the development of theoretical sensitivity as it will make the researcher aware of possibly linked concepts and ideas (Strauss and Corbin, 1998; McCann and Clark, 2003). Given that the author of this thesis had limited research experience, it was deemed appropriate to conduct reviews of the literature before collecting data. They enabled the researcher to make sure the study would be innovative, enhance understanding of the subject under study and to develop theoretical sensitivity (Charmaz, 2014).

Additionally, research methodologies and methods were studied before entering the field. Throughout the research process an ongoing learning process took place via verbal and written reflection on the process in general, personal development, and analytical development. During supervision meetings the data and their implications were discussed with both supervisors to further understand its meaning to enhance theoretical sensitivity.

### 3.5.8 Reflexivity

Within constructivism it is argued that everyone holds their own interpretation of reality. The researcher is actively involved in the construction of the reality under study.

*‘Charmaz’s constructivist approach actively repositions the researcher as a co-constructer of experience and meaning (...) and sees the researcher as an interpreter during analysis rather than the ultimate authority in defining the data.’ (Giles, De Lacey and Muir-Cochrane, 2016, p.30)*

This means that the experiences of the researcher in previous and current times influence their interpretation of reality, and these experiences should be examined in relation to the research process (Charmaz, 2014).

I am a registered general nurse and have been nursing since 2008. I have experience within the care of older people in the Netherlands and the UK, and am familiar with conducting assessments using all or some characteristics of CGAs. The experiences from working on a hospital ward for the care of older people, will inevitably have shaped my views and perspectives. I have aimed to be reflexive (Charmaz, 2014) by writing field notes during data collection and analysis. These notes facilitated an increased awareness of personal ideas and beliefs in relation to the research topic. Reflection also was a way to

develop analytical ideas regarding the analysis of the study, and was done in narrative form. In addition, during supervision meetings both personal ideas and beliefs, as well as analytical developments were discussed and challenged regularly. Through these reflections I have aimed to become aware of my own perspective, beliefs and values, and intended to look beyond them (Charmaz, 2014). A detailed reflection on the research process can be found in the discussion chapter of this thesis.

At all times the aim was to understand the assessment process from the point of view of those involved by including a variety of data collection methods which were interviews, observation, document reviews, and a focus group near the end of analysis to explore whether the findings continued to resonate with the professionals' experiences. Data were read and reread many times in different ways to aim for a framework that was grounded in the data.

### 3.6 Ethical considerations

Ethics are needed to protect research participants from harm or abuse. In 1964 the first Declaration of Helsinki was published which was last reviewed in 2013 (World Medical Association, 2013). This declaration gives a number of guidelines to be followed when research is undertaken, such as the need to maintain the health and wellbeing of participants and for voluntary informed consent from participants.

In the UK, several documents have been published regarding good research conduct, ethical aspects of research, consequences of misconduct, and the role of organisations and individuals (UK Research Integrity Office, 2009; Research Councils UK, 2013; University of Warwick, 2016). The following section will focus on the ethical aspects of this study including ethical approval and informed consent.

#### 3.6.1 Ethical approval

The first research protocol submitted to the ethics committee aimed to include professionals and patients without cognitive impairment, as well as patients with cognitive impairment and their carers. This was rejected by the ethics committee, who felt the study could be done without patient with cognitive impairment and their carers. The research protocol was adjusted accordingly and resubmitted, along with informed consent forms, information sheets and supporting forms, to West Midlands- Coventry and Warwickshire Research Ethics Committee (REC) with the REC reference number 14/WM/1229. Additionally, it was submitted to the Research and Development



department at the University Hospital for written approval. Approval was gained from both parties before the study commenced, and the accompanying documentation can be found in Appendices 6 and 7. The implications of excluding patients with cognitive impairment and their carers have been addressed in the discussion chapter under limitations of the study.

### 3.6.2 Recruitment and informed consent

#### 3.6.2.1 Professionals

In this section the recruitment strategy and the process towards informed consent is addressed. Whilst recruiting participants and collecting data in the field, the researcher used her experience as a nurse on hospital wards to blend in with the pace on the ward:

*'I try to melt into their 'flow'.'* (Reflection 17-8-15)

Regarding recruitment and consent from HCPs the following steps were taken. Awareness of the study was raised with a few ward posters with the basic information of the study (Appendix 8). The ward manager was engaged from the beginning via an informal introduction meeting to explain the purpose and process of the study. To include the HCPs working on the ward in the study, the researcher visited the ward to explain the study. Due to the busy and ad-hoc nature of the ward this often happened one-to-one when professionals had a minute to spare. An information sheet (Appendix 9) was handed out and questions were answered. All professionals were given the time they needed to initial and sign the consent form before any type of data collection was commenced with the particular potential participants. This usually meant the form was signed within 24 hours of their first introduction to the study. On this consent form they initialled the data collection methods they would like to participate in, including interviews, observation, and/or a focus group (Appendix 10). Recruitment was ongoing through the year of data collection. If a HCP did not consent to participation in the study, he or she was not included in any type of data collection. Professionals signed and initialled the consent form and received a copy of the signed document for their personal records. The original is kept by the researcher and stored securely at the University of Warwick.

#### 3.6.2.2 Patients

Patient participants included those with capacity to consent, including those who did not speak English as a translator could be made available. Excluded were those who received end of life care and those who lacked capacity to consent. Recruitment started with the

researcher asking professionals which patients would be suitable to approach. If they were able to locate a patient, the professional would be asked to notify the patient of the study and ask them if they would be willing to speak with the researcher about possible participation. If so, the researcher was introduced to the patient by the professional and the information sheet (Appendix 11) was discussed with and handed out to the patient. Patients were given at least a day to decide whether or not they would like to take part. This gave them time to process the information, and discuss it with others if they wanted to do so. On return from the researcher the patient was asked to initial and sign the consent form if they were happy to participate in observation, interviews, and/or a document review (Appendix 12). Patients who requested additional time to decide were facilitated and visited again on another day to discuss participation. Patients who did not want to participate in the study were not included.

For those who did not speak English, a translator would be asked to read the information sheet as well as the items on the consent form. If the patient was happy to participate he/she had to initial and sign the consent form. If the researcher wanted to ask any questions to the patient, the translator would be asked to translate between the researcher and patient. During the study the use of a translator was not needed.

For the researcher to decide if a patient had the capacity to consent whether or not to participate in the study, she followed the Mental Capacity Act (2005). The MCA states that people who lack capacity are those who are unable to make a decision for themselves. This is due to an inability to understand, retain, use, and/or weigh information relevant for the decision, and/or the inability to communicate their decision to others. As capacity is always decision specific, the cognition review was focussed on the patient's capacity to decide on participation in the study. To make this decision the ward staff was consulted and the researcher communicated with the patient. The initial chat to introduce the study, as well as the follow-up visit to discuss actual participation were used to observe the cognition of the patient. When assessing the patient's cognition according to the MCA, the researcher explained the research to the patient, aiming to do this according to the patient's cognitive abilities. During the conversations attention was paid to whether the patient understood what the study was about, what they were asked to do in relation to the study, why he or she was asked to do this, what the consequences were of taking part, and whether he or she was able to make a decision based on having the relevant

information and the ability to retain information. The researcher drew on her experience as a registered nurse within the care of older people since 2008, and undertook an online toolkit training course regarding capacity assessments as suggested on the website of the NHS Health Research Authority and provided by the University of Leicester and the University of Bristol (2010).

Patient participants signed and initialled the consent form and received a copy of the signed document for their personal records. In addition, a copy of the signed consent form was kept in their medical notes. The original is kept by the researcher and stored securely at the University of Warwick.

### 3.6.3 Confidentiality and anonymity

*'Every precaution must be taken to protect the privacy of research subjects and the confidentiality of their personal information.'* (World Medical Association, 2013)

Confidentiality of the participants and their data (Clark, 2006) was ensured by providing all consent forms with a participant identification number. Instead of the participant's name, this number was used on all other documentation and data that were collected from observation sessions, interviews, document reviews, and the focus group discussion. Consent forms are locked away from all research data. The researcher made sure that any description of participants could not lead directly to identification of those participants. For instance, due to including participants from one ward from a variety of disciplines, some of these disciplines are grouped together as allied health care professionals to ensure individuals could not be identified.

### 3.6.4 Safety

During observation the researcher provided assistance in the field, according to the NMC code of conduct (NMC, 2015). She arranged a contract with the Trust providing her with the contractual safety of being allowed to assist patients on the ward if this was needed to guarantee a patient's safety.

Interviews were conducted at the hospital in a place suitable for interviewing and digital recording. Participants were asked whether they had a preferred area, and all patients requested to remain in or near their bed. The researcher aimed to position herself close to the patient to facilitate a quiet conversation to enhance privacy. Interviews with

professionals took place in the office spaces in and around the ward, depending on the participant's preferences.

### 3.6.5 Data storage

Actions regarding data storage are according to the Data Protection Act (1998) and previously mentioned Research Governance Procedures:

- Only research team members have access to the original data, including Hanneke Wiltjer, Dr. Elizabeth Tutton, and Prof. Kate Seers.
- Contact details are stored separately from the data in different secure storages at the University of Warwick, and will be destroyed when the report of the results is finalized for publication.
- Consent forms including the name-number combinations of all participants are stored separately in secure storage by the University of Warwick, and will be kept for ten years to provide a complete retrospective audit, if necessary.
- Raw data, such as recorded interviews, will be destroyed at the end of the study.
- Anonymous data, such as transcribed interviews, document review forms, and field notes are stored in an encrypted and password protected computer database in NVIVO10 on the University Server. All will be kept for ten years for research and dissemination purposes. Original hardcopies of data, such as the original hand-written field notes and handwritten document review forms, will be kept for ten years in secure storage by the University of Warwick.
- The chief investigator used a laptop computer to write up her analysis. Whenever possible she aimed to use a university computer. The laptop is password protected and encrypted. Only anonymised data were kept on the laptop and it was only for short term storage. Long term data storage is done on the computer system at the University of Warwick.
- The chief investigator holds access codes and keys for digital and physical storage space. A sealed envelope with all digital codes was given to the supervisors to be stored securely at the University of Warwick and only to be used in emergencies (MANTRA, 2017).
- Data will only be used for purposes agreed with participants, which includes publication in written form.

### 3.6.6 Indemnity/Sponsorship

The University of Warwick acted as a sponsor for this study and has in force a Public and Products Liability policy and a Clinical Trials Insurance Policy which provides cover for claims for 'negligent harm' and the activities here are included within that coverage subject to the terms, conditions and exceptions of the policy. The accommodating letter regarding the sponsorship arrangement can be found in Appendix 13.

### 3.6.7 Funding

This started out as a self-funded PhD. However, throughout the years private funding was secured to assist with university fees. These funds came from the Nightingale Fund, the Reid Trust, and the Barbers' Company Clinical Nursing Scholarship.

### 3.6.8 Audits and inspections

The study could be subject to inspection and audit by the sponsor and other regulatory bodies to ensure adherence to good clinical practice.

### 3.6.9 Conflict of interest

None to be reported.

## 3.7 Summary

In this chapter the focus has moved from the philosophical underpinnings towards the methods of the study. The use of a constructivist paradigm was argued to study multiple perspectives of professionals and patients on assessment practice within the context of a ward for older people. The constructivist Grounded Theory by Charmaz (2014) was the chosen methodology to shape the study, aiming towards a conceptual understanding of complex processes. The study included a variety of data collection methods: interviews, observation, document review, and a focus group. The practical and ethical aspects were addressed and explained as well, including informed consent, ethical approval, and confidentiality. The methods have been reviewed in the discussion chapter.

## Chapter 4: Findings

---

This study aimed to explore the assessment process from the perspective of patients and the professionals on a ward for older people. In this chapter the findings are presented. An overview will be given of the participants, after which the focus moves towards the core category and the three themes that were found grounded in the data. The connections between the core category and themes are presented in a conceptual framework. A reflexive account regarding the research process, including interviewing, observing, developing the Grounded Theory, and reaching saturation is presented in section 5.3.2.

### 4.1 Participants

Data collection took place over twelve months, from February 2015 until January 2016, apart from the focus group which took place in June 2016. A total of 57 health care professionals gave written consent for either an interview, observation, participation in the focus group, or two or three of these options. This resulted in 22 interviews with health care professionals from different disciplines (Table 1), and a focus group with six professionals (Table 1). Observation sessions were held with three patients and 51 health care professionals (Table 1 and Table 2). One professional provided consent, but was not included in data collection due to logistical reasons. The observation sessions were done with the researcher as a participant observer, however throughout data collection participation only happened on a few occasions to ensure patient safety and comfort.

During the twelve months of data collection, 54 patients without cognitive impairment were asked to take part in the study. Three patients agreed to participate in observation, and fifteen agreed to an interview. These eighteen patients also agreed for the researcher to undertake a document review of their medical and nursing notes (Table 2). Of the 54 patients asked to take part, six were excluded during recruitment, as during the recruitment period it became clear that their cognition was compromised. Table 3 provides an overview of the reasons why thirty patients declined participation. Appendix 14 shows an overview of all included patients. They had an average age of 83.5 years, ranging from 67 to 100, including fourteen women and four men. Their average length of stay in the ward for older people was 15.2 days, ranging from two to sixty days.

*Table 1, Included professionals per discipline per data collection method*

Professionals	Number of participants for interviews	Number of participants for focus group	Number of participants for observation
<b>Senior nurses*</b>	6	2	4
<b>Junior nurses**</b>	5	2	14
<b>Health Care Assistants</b>	4	0	13
<b>Physicians</b>	3	1	10
<b>Allied HCPs***</b>	4	1	10
<b>Total</b>	<b>22</b>	<b>6</b>	<b>51</b>

\*All band 6 nurses and above, \*\*All band 5 nurses, \*\*\*All professionals that are not part of the other four professions

*Table 2, Overview of observations and document reviews*

Location observation	Nr of sessions	Total Hours
<b>At patient's bedside</b>	3	9.5 hours
<b>At nursing station</b>	7	20.5 hours
<b>Handover ward nurses</b>	3	1.5 hours
<b>Handover senior nurses</b>	3	3.25 hours
<b>Board round</b>	2	1.5 hours
<b>Document review</b>	18	9.5 hours
<b>Total</b>	<b>36</b>	<b>45 hours and 45 min</b>

Table 3, Reasons patients declined participation

Reasons for declining participation	Number of patients
Physical reasons (poorly, tired, unable to coop)	9
Documentation (unable to read/understand, unhappy to sign)	9
Not interested	7
Family unhappy with participation	4
No reason given	1

## 4.2 An introduction to ‘Navigating’

Table 4, Coding tree with core category, themes and codes

Core category	Navigating						
Themes	Containing complexity			Networking		Situating the process	
Codes	Elements of assessment	Ways of working	Managing competing demands	Networking between professionals	Networking between patients and professionals	Meeting individual patient needs	Daily ward life

The coding tree includes a number of codes, three overarching themes, and a core category (Table 4). The findings presented the core category of ‘Navigating’ as the key social process used in assessing older people. This activity incorporated three themes, which are ‘Containing complexity’, ‘Networking’, and ‘Situating the process’ (Box 2), and it was presented as a complex, skilled, and professionally led activity.

### Box 2, Definition of ‘Navigating’

Navigating is context dependent, social process, in which each assessment can be conducted in a different way. It encompasses extensive networking involving professionals and patients, and professionals contain complexity through using formal and informal, visible and invisible ways of working, as they prioritise aspects of care with the aim of meeting competing demands.



During the focus group the core category of 'Navigating' was explained to the group. Their response was positive, as they were able to identify it with their practice:

*'That is why navigating is such a fantastic thing, because when you are navigating through different obstructions and you are constantly receiving information as to where you need to go, that is a good word, a fantastic word, I like it.'* (Physician 39)

*'You can see it in your head.'* (Senior nurse 20)

*'Like making your way through.'* (Senior nurse 55)

In the following sections the three themes are presented in more detail. These three themes together led to the core category of navigating, which is explained in more depth after the themes have been explored. Then the core category and themes are presented as a framework (see page 164), representing the assessment process on a ward for older people. The tables to present the codes and categories, as well as the conceptual framework can also be found on the very last two A3 pages of this thesis, which can be folded out, so they can be presented next to the text.

## 4.3 Theme: Containing complexity

Table 5, Codes within theme 'Containing complexity'.

Theme	Codes	Sub codes
Containing complexity	Elements of assessment	Knowing
		Understanding
		Acting
	Ways of working	Levels of formality
		Levels of visibility
		Prioritising and separating care processes into tasks
		Task oriented approach
	Managing competing demands	

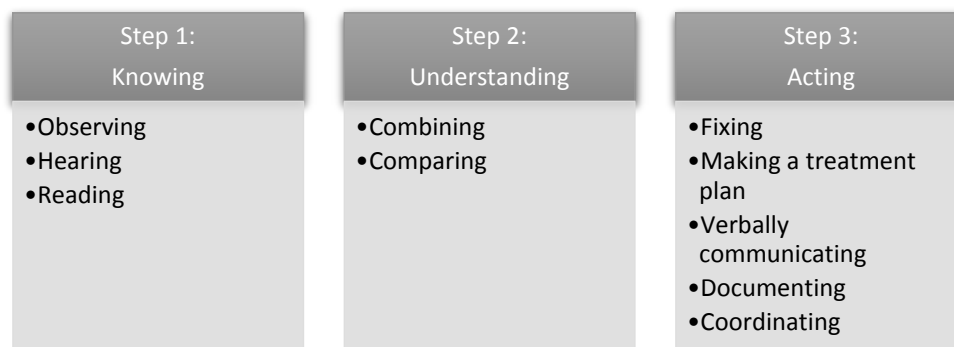
Navigating the assessment process includes the theme ‘Containing complexity’ (Table 5). Within this theme the different elements of assessment are presented in relation to three assessment steps found in the data: knowing, understanding and if needed, acting. Different ways of working are explained, including different levels of formality and visibility. Additionally, professionals use a separated and prioritised approach in which comprehensive care processes are divided into isolated tasks. This was linked to hierarchy and specialisation within different disciplines. All these approaches are incorporated into practice to manage competing demands. This theme shows the complexity of navigating assessment processes, and it presents a number of ways in which professionals aim to contain this complexity and make it work.

#### 4.3.1 Elements of assessment

Each navigated assessment process could incorporate the three steps of knowing, understanding, and if needed, acting. These steps could include different elements as the professional navigates through the process. For instance, the step of knowing included observing, hearing and reading. In Figure 2 the different elements for each assessment step are presented graphically.

For each individual piece of knowledge, on any topic such as dietary needs or a low blood sugar, these steps could be navigated. At each moment in time professionals might be undertaking several of such three step assessment processes regarding different pieces of knowledge, aiming to undertake a comprehensive and multi-dimensional assessment of one or more patients. Once action has been undertaken a review can take place by gaining new knowledge, and therefore restarting the navigation through the three steps. In this section the three steps of assessment which need to be navigated, are further explained using quotations from the data.

*Figure 2, Elements of assessment*



#### 4.3.1.1 Step 1: Knowing

The first step within the assessment process was to know what there is to be known about the patient at that particular moment in time. In this process professionals aim to gain knowledge, and the data suggested the use of three different methods: observing, hearing, and reading.

##### 1. Observing

Seeing and observing the patient provided important knowledge about the patient to the professional:

*'They can tell by looking at you if you are alright or not.'* (Patient 11)

*'Look at your patient. ... You can have all the technology in the world, but actually have you looked at your patient today.'* (Senior nurse 20)

Observing was explained both as an ongoing practice which could be done very purposefully or while doing something else:

*'When you are walking around seeing other patients, you do assess if there is someone that looks awful and make a mental note to go and see them. ... The whole time when you are on the ward, you are making less formal assessments of patient.'* (Physician 15)

*'Carers look through the window and the door opening to quickly scan the room, but don't actually come in.'* (Field notes 2)

##### 2. Reading

Reading was key to gaining knowledge, including the patient notes, handover sheets or bedside folders:

*'There is a folder on each one of us. When they come on duty they all look at the folder.'* (Patient 15)

*'I use that bedside folder when I go to see the patient.'* (Physician 15)

*'I will just have quick read through the medical notes.'* (Junior nurse 22)

##### 3. Hearing

Another way of gaining information was through hearing it from the patient directly:

*'They do say 'are you comfortable'?'* (Patient 14)

*'They ask me whether I have got a pain or not.'* (Patient 15)

Colleagues were also mentioned as a source of information:

*'I told one of the health care workers .... She said, "I will go and speak to the nurse and she will come and speak to you".'* (Patient 17)

*'I think a lot of the nurses ... come to me because ... I know my 18 [patients].'* (HCA 1)

Then there were also the family or professionals who looked after a patient if they are living in a care home, who could provide information about the patient:

*'My husband and son were with me and I think they were sort of answering the nurse's questions.'* (Patient 9)

*'It is really easy to ring the family ... or their care home, ask information.'* (Junior nurse 7)

Hearing knowledge could therefore be from a variety of people, including the patient, their relatives, and other professionals both within the same setting as outside the setting.

#### 4. Using them together

Different ways of gaining knowledge were usually used in combination. The two quotations below showed the use of observation as well as hearing information from the patient:

*'Because I can say I spend so much time with them and I notice it straight away if they are not right .... Then the first thing that comes out of me is I ask the patient how is she, how does she feel?'* (Allied HCP 23)

*'Say if somebody said, "yes I am eating very well", but their clearly cachectic. ... So, I think it is the miss match.'* (Senior nurse 27)

Using a number of sources in combination, rather than only gaining knowledge by asking the patient, was due to different reasons:

*'There are some people that just get muddled and just forgetful. Also, some people that just really don't see themselves as unwell or don't think there is anything wrong with them. ... And ... this generation that just don't want to make a fuss. Or people don't want to be here, so the less they tell us the quicker they can go home.'* (Senior nurse 27)

Professionals combining different sources of information was also noticed by a patient:

*‘But the girls still thought they got to [do a log roll] and I said “no, they have said now that [you don’t have to anymore]”, and one of the nurses, the really qualified one, she says “yeah, they said you didn’t have to hold her head”. But the girl ... says “well that is what he told me to do”.’ (Patient 15)*

In this situation it is the nurse who is providing back up information to what the patient stated, providing the HCA with enough information to move away from her previous knowledge which appeared outdated. The information from the patient alone seemed not enough to convince the HCA to change her practice.

This last example focused on knowledge about patient treatment, and this knowledge appears to originate from a professional. However, when focusing on knowledge about the patient specifically, it could be argued that for all sources of information the patient has ultimately been the initial source. For instance, if a professional reads in the notes that the patient has pain in her back, the information has been processed by the person who wrote it down. This person is not the patient, but he or she most likely gained the information from the patient during an interaction. Related to the constructivist paradigm which serves as the philosophical underpinning of this study, the documented knowledge has become a perception from a ‘third person’, rather than the perception from the patient, who is the ‘first person’. Nonetheless, all different sources including observing, hearing and reading, provide the professional with knowledge they can use to care for the patient.

#### *4.3.1.2 Step 2: Understanding*

After the knowledge was gained by a professional either via observing, hearing and/or reading there is a process in which a decision is made. This is the second step that is to be navigated within the assessment process. It involved understanding and giving meaning to the knowledge gained in the first step. The data suggested two different, but overlapping, methods used by professionals to interpret and understand the knowledge about the patient. The first method is to compare the newly gained knowledge about the patient with other knowledge gained about the patient either via a different route, or at a different time. The second method is to combine knowledge about the patient with a different kind of knowledge, such as academic knowledge or even just ‘common sense’. These methods were often used in combination.

## 1. Comparing

HCPs compared information in two different ways. They compared current information with what they call 'baseline information', and they compared information between sources. One is comparing information with past information, the other is comparing information with different accounts of the same event or moment:

*'I think I am trying to match what they are saying with what the picture is, the clinical picture the drugs, you know, the blood results, the blood pressure, all the clinical stuff as well as what they are saying, what they look like.'* (Senior nurse 27)

*'HCP 34 says about a certain patient: "she is just not herself" ... and HCP 34 gives a number of reasons such as reduced mobility ... she says with most things that the patient wasn't like that yesterday.'* (Field notes 9)

*'We always like to get information of what they are normally like, like their baseline, so that we can compare what they are like now to what they are normally like.'* (Junior nurse 22)

Sometimes the current situation was compared with a previous situation, which was referred to as 'getting a baseline'. Therefore, comparing was something that could be done in two ways, either horizontally comparing different accounts of the same events, or vertically comparing different moments in time.

## 2. Combining

The second technique used by professionals to interpret and understand the information about the patient is by combining knowledge. However, this was not as obvious in the data and it seems to be a step in the assessment process not easily explained which might be due to its internal nature:

*'You look at everything ... are they in bed or are they in the chair, are they looking uncomfortable, do they look in pain, do they look well, do they look unwell, do they look pale, ... do they look in good colour, are they smiling, do they look confused.'* (Senior nurse 27)

It showed an implied meaning, where somehow the professional knows that a pale looking patient is not a good thing. The knowledge gained in the first step via observation, is that the patient is pale. However, the statement above goes a step further where the

professional gives meaning to paleness, suggesting she understands pale skin to be concerning for this patient. This could be with a reference or knowledge gained via academic learning, it could be based on common sense, or it could be due to the professional comparing the information with baseline information from that patient, as discussed in the previous section. It is however possible that the professional gives meaning to knowledge by applying other knowledge to it. This may, for instance, include knowledge gained during nursing training around anatomy and pathology, such as the specific symptoms of anaemia.

In summary, by combining and comparing knowledge professionals make sense of the knowledge they have gained about their patient. Within this section the focus may have been more on professionals than the patients. Throughout this chapter this will be further discussed as the data uncovered a rather passive role for the patient within assessment practice on the ward.

#### *4.3.1.3 Step 3: Acting*

Once knowledge is gained and given meaning by understanding it, the professional moves to action if needed. The third step of acting in the assessment process is therefore an optional one. In the data five different ways of acting could be found: fixing, making a treatment plan, verbally communicating, documenting, and coordinating. The last three of these aspects are also key aspects of the theme 'Networking', which is presented in section 4.4.

##### **1. Fixing**

Action can be undertaken immediately by fixing or sorting out the issue. For instance, by providing pain medication to a patient or arranging resources as needed:

*'They say: "Oh I am sorry to bother you". ... It might be a blanket, you know "that is not a problem, I will go and get you one".'* (Senior nurse 10)

*'I take Clamazapine ... I can't bear it without those. And they haven't got any, and then later on, the night nurse came "I have got those tablets for you ... I went down and ordered them myself".'* (Patient 15)

## 2. Making a treatment plan

Making a treatment plan is another element of acting on knowledge about the patient, that has been gained and understood. For most patients a formal treatment plan, or a number of treatment plans, were made during admission:

*'Every patient needs a plan. We can't just be wandering through their treatment and not knowing where we are going.'* (Junior nurse 30)

*'We make sure that we have got a clear plan for the next few days.'* (Physician 39)

Treatment plans were made by a variety of HCPs, as the quotations below represent a physician and a therapist.

*'I still like to make a plan, based on the problems that we have picked up so far.'* (Physician 15)

*'I will come up with a plan of what we need to do with this person.'* (Allied HCP 53)

When looking at making treatment plans, it was found in the data that standardised nursing care plans do not really lead to an individualised written treatment plan:

*'Care plans are not personalised, they are standard care plans and just require a signature from the nurse who puts it in the folder.'* (DR Patient 2)

*'We have to print them out ourselves. So when we go on the internet ... and it will have all the care plans. ... Most of them are like generic for everybody ... like the handling and moving, skin, falls, they are all just the same, you can't change them.'* (Junior nurse 22)

Although nurses may not write individualised treatment plans for patients, their role was important within provision of patient care by the multi-disciplinary team. This is addressed in more detail as part of the theme 'Networking'. The role of the patient within decision-making regarding their treatment and care is also further discussed in that section.

## 3. Coordinating

Coordinating care requires a logistical plan, which differs from a treatment plan as it focuses on coordinating the process of care, whereas a treatment plan focuses on deciding the content of individual treatment. This process of logistical planning could be invisible when HCPs made these decisions in their mind without communicating them to



others. Logistical plans were closely linked to job lists or to-do lists, in which professionals planned their own care delivery for each individual patient:

*'I tend to get a piece of paper and write my list of jobs down ... The nurses have their own jobs list and they then write it on their jobs list.'* (Physician 13)

*'Sometimes not all of the jobs on the jobs list are done ... but then it depends how busy it has been. If you have got 'poorlies', they have obviously been focused on that more.'* (Junior nurse 24)

Logistical planning was highly influenced by a separated approach where care processes were divided in isolated jobs carried out by a number of care professionals:

*'She mentioned a few times that the doctor in the morning seemed like a general doctor, with no particular interest in her knee or her blood. About the knee he said: "I am not orthopaedic", and P5 said she was to see a specialist about the blood in a few days.'* (Patient 5)

*'The young doctor, because she is medical, she didn't know the surgical side of it. So I don't know what is going to happen with the surgical side.'* (Patient 8)

These examples showed how the planning of care was dependent on the fact that different people have to be involved for different aspects of care. The separated approach to care is further addressed in section 4.3.2.3.

Logistical planning by professionals could be created based on their own treatment plan, provided they make one, or through treatment plans or logistical plans made by others:

*'I will come up with a plan of what we need to do with this person.'* (Allied HCP 53)

*'I just try and make sure that everyone who needs to do something knows that they are doing it .... If it is stuff I am going to do, I just jot it down to do it at some point later on that day.'* (Physician 15)

This section focused on coordinating the provision of care by each individual professional. However, coordinating the team process is also crucial part of planning care. As this was found to be a key part of 'Networking' as well, coordination of the multi-disciplinary team process will be presented in depth in section 4.4.

#### 4. Verbally communicating

Another way of acting on knowledge was by verbally communicating it. This included communication between professionals, as well as communication between patients and professionals. This was not merely a way to act on knowledge that had been gained and understood, but it was a key aspect of the process of 'Networking' within the navigation the assessment process (see section 4.4).

#### 5. Documenting

Documenting the care process also was a way to act on knowledge that had been gained and understood. Professionals used a variety of documents to address this throughout the day. These documents were part of the networking system between professionals and due to this, documenting is addressed as part of the theme 'Networking' in section 4.4.

### 4.3.2 Ways of working

In this section the different ways of working that were found in the data are presented. These ways of working contain different levels of formality and visibility, and care was found to be given in a separated and prioritised way, resulting in comprehensive process being divided into isolated tasks (Table 6).

#### 4.3.2.1 Levels of formality

##### 1. Informal way of working

The informal way of working was explained by professionals, especially in relation to the first two steps of assessment practice, which are gaining and understanding knowledge:

*'It is like a light bulb moment. That is the only way I can describe it.'* (HCA 1)

*'It is not as if it follows a form or pattern, it does in your own head, if that makes sense.'*  
(Senior nurse 17)

*'Sometimes your experience will tell you "this patient isn't well", straight off.'* (Senior nurse 20)

*'Nurses would say that your gut instinct is telling you and you cannot explain that.'* (Senior nurse 20)

*'You seem to have a, it is like a feeling as well, it is ever so strange.'* (Junior nurse 30)

These quotations showed the use of terms related to an informal approach. It is explained as an internal process, potentially based on instincts, and often based on a feeling. This informal assessment approach does not follow a standardised pattern, and was developed through experience. Additionally, this informal way of working was not always documented.

Informal ways of working were used in all three steps of assessment practice, and examples were numerous and given by all disciplines.

*'I tend to just kind of catch the nurses wherever they are and say: "Do you have any worries about this person"?' (Physician 13)*

*'I think that nurses are just assessing patients all the time. I mean when I come on shift I would walk around all the patients ... just seeing like how they are, just see if they are talking to you, if they are confused or um, just having a look at their skin. If they are sitting up straight and things like that.'* (Junior nurse 7)

*'Say if I have been in the same area for a couple of days and I come back in, and they look different, like they look clammy, they look skinnier ... I would just say "she looks a bit grey today".'* (HCA 34)

These examples are from professionals. Patients did not explicitly mention this kind of assessment, which further suggested the internal nature of this approach adopted by professionals.

When looking at the different elements which could be used in each of the three steps of the assessment process, knowing, understanding and acting, the informal methods could be explained as follows. The first step of gaining knowledge could include, for instance, ad-hoc communication with a colleague or with a patient as mentioned by physician 13 above, or quick observation:

*'We are taught to look at your patient .... I look at the colour, make sure they are alright, they are not distressed ... do they look comfortable, do they look cared for.'* (Senior nurse 20)

The second step of the assessment process involved understanding knowledge about the patient. This process, where a professional compared and combined information in their mind, could be rather invisible to others. Due to it being something they did in their mind

without a predesigned number of steps, it could be seen as an informal process. An example of an informal way of working in the third step of acting is, for instance, a patient having trouble breathing after the oxygen tube has slipped down and a nurse readjusting it to fix the problem:

*'So then you are looking at everything, are they meant to be on oxygen, has it come out.'*  
(Senior nurse 9)

In summary, the informal approach to assessment is a crucial part of the assessment process. It is an internal process, in which professionals rely on experience and feelings, processing information in their head. This does not necessarily result in a verbalisation or documentation of it, although it could. It seemed an embedded way of working, seemingly natural to the professional who used and incorporated this process in the overall care for the patient. The informal ways of working in relation to communication are further explored in the theme 'Networking'.

## 2. Formal ways of working

Where the informal way of working was linked to experience, feelings, internal processes and an ad-hoc nature, a formal way of working differs in a number of ways. The formal approach is closely linked to documentation. In addition, a formal approach to assessment includes a structured and standardised manner of working, where there are a set number of steps that need to be taken, sometimes in a certain order, to do the full assessment. The assessment is always externalised via verbal or written communication, often with designated forms which will be filed in the nursing or medical notes.

As opposed to the informal assessment, formal assessment was not only mentioned by professionals. Patients also mentioned these:

*'I had one last test yesterday, that was going to the kitchen and making a cup of tea.'*  
(Patient 16)

*'I am hoping to go home ... I am waiting for an assessment now ... an assessment for more care.'* (Patient 7)

The first patient calls it a test, the second patient uses the word assessment. In both cases they refer to a formal assessment process. Both are conducted using a predesigned and

specifically designated form. Examples from the professionals' data might further illustrate the formal way of assessing:

*'I start off with the history which I get from not only my juniors and from what is there in the notes, I go and talk to the patients myself just to make sure that whatever is written in the notes is also what the patient is saying. ... Sometimes they have dementia, delirium ... so we then arrange for their relatives to come and speak to us .... If they are not able to give a history I go straight to the examination of the heart, the lungs, look at the observations that have been taken. ... It is a clinical examination that I go through to get that information.'* (Physician 39)

*'When the patient arrives we will do their observations first. Then we normally check their skin and document it and then I will start the admission paperwork.'* (Junior nurse 22)

The first example is lengthy, but only by showing it in their entirety it shows a systematic and standardised approach to an admission of a patient onto the ward. It goes through a number of steps such as gaining knowledge from colleagues or notes, receiving a background from the patient or relatives, and a physical exam of the patient. This suggests a systematic way to assessing a patient. The second example shows a nurse explaining her admission routine. She mentioned the admission paperwork as guiding her through the activity, showing the standardised approach she follows here.

The formal approach to assessing can be initiated through its documentation:

*'Get the paperwork ready. So we have the medical care plan, we have the comment sheets, the normal evaluation sheets ... health care record A ... and there is further risk assessments that we have to add to the plan and complete that.'* (Junior nurse 29)

In relation to the admission documentation one nurse stated:

*'Without that paperwork I wouldn't be having that conversation ... assessment encourages conversation.'* (Senior nurse 9)

This shows how the documentation steers the formal process, providing content to it. This is different from the informal way of working which seems more internally triggered. For instance, professionals may observe something out of the ordinary such as a patient being less chatty than the day before, or they hear concerning information from a colleague. Based on this knowledge they undertake further steps.

Examples of formal assessments are for instance stairs assessments by physiotherapists, kitchen assessments by occupational therapists, admissions by nurses, and daily reviews by physicians. A daily medical review is directed by hospital policy and there is a standardised way of documenting the activity in the medical notes. A stairs assessment follows a certain pattern after which the professional fills in a designated form to report the result of the assessment. Therefore, all disciplines undertake formal assessment processes.

When looking at the three steps of the assessment process, knowing, understanding and acting, the formal methods within an assessment can be explained as follows. Knowledge can be gained in a formal manner, which can also be seen in the example of formal assessment provided by physician 39 on page 124. The second step of understanding knowledge can be illustrated in risk assessments, where an assessment results in a score. The score then dictates the grade of concern. and which actions ought to be taken. Therefore, the score implies how knowledge needs to be understood. For example, a Waterlow score directs the mattress choice for a patient:

*'Their Waterlow score, you might want to upgrade the mattress.'* (Junior nurse 22)

This is different from the informal process, where the professional internally gives meaning to knowledge. Step three, where action is taken, can include, for instance, formal documentation or communication, such as board round or handover (See 'Networking').

### 3. Combining formal and informal ways of working

To navigate through the assessment process the professional can use a variety of elements throughout each assessment step, in order to reach a goal or a number of goals. This is embedded within both a formal and an informal approach to care. Professionals spoke about the formal and informal ways of working as an interlinked and combined approach, where both are perceived relevant. The informal process seemed natural and key to the professionals:

*'Sometimes you have the informal thoughts first, ... with experience and confidence you trust your informal thoughts first before you have the evidence to back it up ... but then you look for the evidence to back up what your instincts are revealing.'* (Allied HCP 44)

However, junior nurse 7 explained how she felt the informal process was not always acknowledged, likely due to its internal nature:

*'I might see a patient and they might look unwell and I ... act upon it. But if I haven't formally put it down it is not really acknowledged ... they wouldn't sort of look at ... what you would have done in your head.'* (Junior nurse 7)

*'The documentation is important ... in today's society and the culture that we live in it just proves the point that if it not written down it hasn't happened.'* (Junior nurse 30)

The first of these quotations shows how the informal process is valued heavily by professionals. The second one shows how the formal process has gained importance from outside the profession, which the participant calls 'society' and 'culture'. The idea that if it is not written, it is not done, does not acknowledge the importance of informal assessment, as mentioned by professional participants of this study.

Professionals explained experience as an important aspect to trust their informal thoughts:

*'When I was more newly qualified I wasn't necessarily trusting my instincts at the beginning, but as I have gotten older, and so it has been proved right over and over again, you trust your instincts a bit more.'* (Allied HCP 44)

*'The significance of formal and informal assessments ... is dependent on your experience. So someone like a newly qualified nurse would go more on the formal assessments rather than the informal assessments.'* (Junior nurse 7)

Senior nurse 10 explained this in relation to supervising students and newly qualified nurses:

*'They are both young ... and I said to them, with age comes experience ... because they know all about their nursing bits, but sometimes they struggle with making decisions. But as you get older you get confidence ... you can see things better as you get older, with experience.'* (Senior nurse 10)

With increased experience the internal instincts and processes seem to gain trust, as they have proved themselves in previous situations. Junior professionals use the formal process to make sure they don't go wrong, but all the while their informal processes are strengthened and enhanced by the experiences they go through.

Examples of professionals combining formal and informal ways of working were found in the data:

*'I ask HCP 29 ... where the information comes from to fill in the updates [of risk assessments]. HCP 29 explains about constant visual assessment of the patient, and regular checking of the bedside folders. ... By the time updates are filled in, enough information has been gathered to fill in most of it without having to recheck. ... I realise how much information is stored in a nurse's brain, little things just picked up, enough to fill in almost a whole risk assessment booklet.'* (Field notes 16)

*'If someone comes up to me and says: "I am worried about this person ... they are a bit chesty", then I would go and do a more detailed examination if I had already seen them, or take that into account when I am seeing them that morning.'* (Physician 13)

The first example shows how HCP 29 uses informally gathered information to fill in a formal risk assessment. The last example shows how a doctor uses an informal message to do a more formal examination of the patient. Both approaches seem to work together, and professionals from all disciplines navigate their way through both approaches, using bits here and there, combining it in a way that allows them to meet competing demands, see section 4.3.3.

#### *4.3.2.2 Levels of visibility*

Some activities are invisible, or less visible, due to their internal nature, others are so because of the physical place where they are undertaken. Both formal and informal approaches can be either visible or invisible in nature. In this section the levels of visibility will be further explained from the perspective of professionals as well as patients.

##### **1. Levels of visibility from the perspective of professionals**

*'I am looking at absolutely everything, everything is going through my mind when I am assessing somebody, about how they do something, how they react, how they respond, how they communicate, what they are doing.'* (Allied HCP 53)

Here the assessment is taking place in the professional's mind. Although some may notice or be aware of what she is doing, it may not always be clear to everyone. HCA 1 said:

*'I walked in the bay ... and you automatically do a quick scan of all six beds.'* (HCA 1)



This explains an informal assessment as a quick scan of the room, which may not always be visible to colleagues and patients alike. As informal assessment does not always lead to documentation or communication, an assessment process may remain invisible. At times an informal process may not even be a conscious thought to the professionals themselves:

*'I find there is a lot of things that we think, not even consciously.'* (Senior nurse 14)

*'And then also, probably not even consciously, but you pick up whether someone is very elderly and frail and not got much reserve or whether they are younger and fitter.'* (Physician 15)

The examples presented in this section suggest the invisibility of aspects of assessment practice from the perspective of the professional. Invisibility was found especially regarding the informal ways of working, as the formal ways of working are usually made visible to other health care professionals via written or verbal communication.

## 2. Levels of visibility from the perspective of the patient

Assessment practice can be undertaken invisibly for the involved patient. From the patient's perspective invisible assessment practice included both formal and informal approaches. The informal approach was similarly invisible to the patient as it was to health care professionals, as was explained in the previous section. However, where formal assessment usually becomes visible to other professionals via documentation and communication, formal assessment processes can be invisible to the patient when they are done out of their sight. The researcher reflected on observation sessions with patients:

*'I have been able to look at care from a patient's perspective, and again I am surprised by how little is done with the patient. A lot of what staff do, seems to be done out of the patients' view and earshot.'* (Field notes 2)

Patients also mentioned how professionals appeared to work out of their vision as they recalled hearing them outside the bay:

*'I think they stood outside ... they were being brought up to speed with the condition and everything that I was in.'* (Patient 9)

*'You can't see them. You can hear them, but you can't see them.'* (Patient 11)

One of the nurses mentioned how she had tried to do her documentation in the bay to make it more visible for the patient, but she struggled to do so:

*'Some of the nurses are saying that we should be with the patient while we are writing, however I have tried it so many times and it is just impossible. ... You can't get anything done, it is really difficult.'* (Junior nurse 22)

During an observation session on a Saturday, updates of risk assessments were carried out at the nurses' station, which meant a formal assessment was conducted out of the patients' sight:

*'HCP 2 starts updates at the desk. She wheels the trolley next to her and starts updating the weights.'* (Field notes 16)

The following example shows how professionals communicate and assess around the desk in the corridor. This means their activity is not visible to the patient:

*'The nurse speaks to Allied HCP 28, who asks info about a patient's continence .... This all happens in the corridor at the desk.'* (Field notes 5)

In summary, the informal ways of working may be invisible to professionals themselves as they mentioned having certain thoughts *'not even consciously'*, and it may be invisible to their colleagues and patients as it remains an internal process. However, documenting or communicating the informal process, or the outcomes of these process, will aid their visibility. The formal way of working is usually visible to professionals as it involves formal documentation and formal communication, which can be read or heard by those involved. To patients, however, the formal assessment may be invisible due to it being done out of their sight and earshot.

#### *4.3.2.3 Prioritising and separating care processes into tasks*

Navigating assessment to contain complexity, includes the use of a prioritised and separated approach to care.

*'Time is something that everybody lacks these days. Because you cannot do everything for everyone all the time. But we try to do what is more important.'* (Physician 39)

*'You cannot always do what you want, you know, time ... I think the frustration is not having enough staff.'* (Senior nurse 20)

The physician mentions that sometimes professionals have to prioritise, or focus on what is most important. Prioritising care can be seen as a strategy to manage and meet a large number of potentially competing demands, which will be presented in section 4.3.3. Prioritising is a way of working where constant decisions are made on what to do first and what to put on hold:

*'I understand they cannot wait on any particular person because they have got more than one person to look after.'* (Patient 11)

*'You could be having three admissions in your area. So you are going to do the important ones or you get as much as you can.'* (Senior nurse 20)

The decision on what is prioritised may differ per profession though:

*'Our priorities as nurses are sometimes different from the priorities of the junior doctors. Where the junior doctors kind of just want to get through and see all the patients for that day, but I want a TTO [medication to take home].'* (Junior nurse 33)

Nonetheless, all professionals usually prioritise acute medical issues above chronic or social issues:

*'Obviously we need to address medically, um, is the priority.'* (Senior nurse 9)

*'If an ECG is needed urgently then that goes on top of everything else. It just overrides ... like leg dressings.'* (Junior nurse 30)

*'I mean physiotherapy came and took me to walk from here to there and back during the day and that was all the physiotherapy I had that day. Which is not enough. ... They said: "well, you are not here for that reason".'* (Patient 11)

Social issues are addressed once the patient is medically fit and not before:

*'We are aware of patients before they are actually medically stable for discharge, although we can't actually start the discharge planning until they are.'* (Allied HCP 28)

*'I personally have to see people who have to be medically stable, for me to have any input with them.'* (Allied HCP 36)

Another aspect of care that is often not prioritised is the time to 'have a chat' between patients and professionals. This includes chats around topics that are not health care related, such as children and grandchildren:

*'I haven't got the time as such to sit with a patient and make sure they are OK, and they're happy and their needs have been met.'* (Junior nurse 30)

*'You haven't got time to have a little bit of a chat, you know, it is like ships in the night. You just don't have the time to have little bit of a chin wag with them.'* (HCA 47)

All these examples show how navigating is steered by prioritising care. Resources and time are limited and therefore professionals aim to focus on what is most important. These decisions are shaped by the demands that need to be met, such as the need for written evidence, the need for speedy discharges and the need to guarantee patient safety. Each moment may require a different approach due to the priorities that are steering the process along.

*'They are telling you the patient isn't well. You are not going to wait for the notes and things, you need to get on the phone to the doctor.'* (Senior nurse 20)

When looking at this quotation by senior nurse 20 it shows how sometimes a situation requires a quick response from professionals due to acute medical issues.

Another strategy professionals can use to manage competing demands, apart from prioritising, is by separating care processes. This links to prioritising as it means professionals can prioritise certain separated aspects of a care process in order to keep a number of processes going. Separating can be found in a task-centered approach to care, which was touched upon earlier in relation to the use of jobs lists.

The data suggested how patients felt rather frustrated by the separation of care:

*'I had to lie flat and not move at all until I had the brace fitted. Nobody knew how to fit the brace up here. So they called ... surgical appliances to come up and show them ... and it was more than 24 hours later when they came up .... I got really frustrated and angry.'* (Patient 8)

*'Everything seems to be in a separate little box ... one department that is my department and outside that you have got to get in touch with somebody else.'* (Patient 13)

When looking at the task-centred approach it becomes clear professionals sometimes focus on isolated jobs that need doing, rather than on comprehensive care processes:

*'Because I have tick boxes, so if there is a job doing, I put a box. And once I have done it I tick it.'* (Junior nurse 22)

*'So any jobs for the doctors I put on there, on the list, and they can tick it off. And jobs for the nurses, doctors put on there, or I can put it on there as well.'* (Junior nurse 29)

Care processes seem to be pulled apart in jobs to do to make it easier for professionals to manage the workload they have to carry.

Separating of care is potentially due to the specialisation and the hierarchical approach within the care system. Specialisation refers to the increase of disciplines, each focusing on one specific area of care. Hierarchy includes the different levels of professionals within one discipline. During observation of a board round the relationship between different disciplines and separation of care became clear:

*'At times different conversations were going on at once ... the ward nurse quickly said to the ward doctor that he should review the IV antibiotics today and he said he would, while the consultant was saying that the CT was clear, and the discharge coordinator asking the physio what she thought about the mobility.'* (Field notes 10)

However, specialisation and hierarchy was also linked to specialist care and advanced knowledge, as well as support for junior professionals:

*'I fine tune it. I think as I said, often the nurse on the ward have probably, had a look at that already but ... they don't go into as much detail as I do.'* (Senior nurse 14)

*'I remember when I was newly qualified it would be more of a panic and then I would have to go to the senior nurses again, to sort of get their experience in.'* (Junior nurse 7)

A separated approach appeared to influence the way patients experienced the process of their admission, including the assessment process. It results in different people holding different information. This has an effect on the way information is shared and on the way an assessment process is navigated, and this is especially linked to the role of coordinator, as will be discussed within the theme 'Networking'. The knowledge gained and understood by different people has to be pulled together, and in some way it has to align in order to provide comprehensive care.

### 4.3.3 Managing competing demands

*'They have so many competing demands.'* (Senior nurse 14)

The senior nurse in this quotation spoke about the demands professionals have to deal with when working on a ward for older people. When relating this to the assessment process this holds true as there are aims to be met through the process that is undertaken. Navigating then, is a way to reach the destination, or destinations. It is a way to steer through the process to meet the demands. Everyone involved has different aims. First the patient aims, and then the aims from professionals and the organisation or the system will be addressed.

Patients have a number of expectations during their admission. Whether their stay has felt as a positive one, is closely linked to their expectations having been met. From the patient data, a number of expectations were found including sorting out the problem, providing answers, encouraging independence, being listened to, being cared for, and having their needs met:

*'They are doing their best to try and sort the problem and get to the root of it and why it is.'* (Patient 4)

*'They were good to me; they took care of me ... most of them made my stay pleasant'* (Patient 6)

*'They care, they have got the compassion. And that is a very important thing in a nurse isn't it. To have compassion.'* (Patient 8)

*'I just want them to mend my knees and send me home really.'* (Patient 10)

*'They need to listen.'* (Patient 10)

Professionals also mentioned or implied a number of aims they seemingly wanted to meet. The main ones found in the data are around caring for the patient and keeping them safe, producing evidence of practice, and being a respected member of the team:

*'I think the most important thing is that the patient is safe.'* (Senior nurse 9)

*'It does make me feel better, it makes me feel that they [colleagues] know that I am actually doing my role properly.'* (Allied HCP 23)

*'Whatever you are doing, you are putting it down on paper. It is your evidence.'* (Junior nurse 24)

Most of the aims above will also be held by the organisation, such as patient safety, providing evidence, and make sure the patients are well looked after. However, there is one organisational aim in particular, which was mentioned to have an impact on patient care:

*'I think because they are so honed in on discharge.'* (Senior nurse 13)

*'Then there is pressures from outside that want patients to be discharged quickly or why are they not going, we are busy at the A&E, why are these patients still here.'* (Physician 39)

The pressure on hospital beds seems to result in a demand to speed up care process, including the navigation process through which patients are assessed.

#### 4.3.4 Summary

In this section the elements of assessment were presented for each step of the process, which are knowing, understanding and if needed, acting. Each step can be undertaken in a different way by incorporating a variety of elements. Professionals included different ways of working as they navigated their way through assessment processes. These ways of working included formal and informal ways, visible and invisible ways, and a separated, prioritised approach to care processes dividing them into isolated tasks. By incorporating all these approaches, different demands were met at different times. The use of a variety of elements and ways of working, showed how professionals aimed to contain the complexity of the navigating process.

## 4.4 Theme: Networking

Table 6, Codes within theme 'Networking'.

Theme	Codes	Sub codes
<b>Networking</b>	Networking between professionals	Multi-disciplinary teamwork
		The role of the nurse
		Verbal communication
		Written communication
	Networking between patients and professionals	Professionals updating patients
		Involving patients in decision-making

A key aspect of navigating the assessment process is 'Networking' (Table 6). This included networking between professionals, as well as between patients and professionals. A large number of people are involved in the care process on a ward for older people, as a multi-disciplinary team aims to work together. This results in a large network consisting of different disciplines and different levels within each discipline. Below the focus is on networking between professionals first, and then networking between professionals and patients is addressed.

### 4.4.1 Networking between professionals

Networking between professionals includes a number of different aspects. First the attention focuses on exploring the different roles within the multi-disciplinary team in relation to assessment, after which the role of the nurse is addressed in more detail. Then the communication is explained, including both verbal and written communication.

#### 4.4.1.1 Multi-disciplinary teamwork

On the ward a number of different disciplines were involved in patient care. Each discipline gave examples of different assessment areas, usually related to their professional focus:

*"I just need to make sure that I know everyone who is under my care ... They wouldn't get a proper assessment if I saw them all in one morning ... whereas if I split them up, over the*



*course of a week, I will know what is going on with everyone. And then on the days that I am not seeing them and the consultant is not seeing them there is enough plan in place for a more junior doctor to progress with the jobs.” (Physician 15)*

*‘I will do patient assessments, I will clerk in new patients, do patient summaries, I will do daily routine medical reviews, daily medical review, the nurses might ask me to see patients that are unwell.’ (Senior nurse 27)*

*‘I think my role is, deliver hygiene needs, feeding patients if need be, toileting, just making them comfortable, if there is any issues resolve them or talk to a trained nurse.’ (HCA 34)*

Each discipline has a different focus. From these quotations the physician focused on reviewing patients and making sure there is a medical plan in place, the senior nurse emphasised reviewing and admitting patients, whereas the HCA concentrated on basic daily needs. Therapists focused on their speciality, for instance physiotherapists focused on patient’s mobility. Therapists’ quotations are not given as their explained assessment focus points to a certain therapist and this may uncover anonymity. The role of band 5 nurses who are usually looking after up to twelve patients in a certain area of the ward, seemed to include the broadest range of activities:

*‘We tackle the plan, keep the patient safe, do the usual observation, see if they are medically OK ... and administer medication safely, talk to relatives, ... documentation, which is always key. And also medical notes, liaising with doctors, other teams, such as therapists.’ (Junior nurse 29)*

The quotations in this section show how a professional’s position influences how they navigate the assessment process. Senior nurse 27 speaks of daily reviews and admission, showing how formal assessment appears key. HCA 34 explains how she works closely with the patient, looking after their basic care needs, and if anything seems out of the ordinary she will inform a nurse. The nurse seems to aim to be aware of everyone’s activities in order to pull it together. When relating this to the three steps of the assessment process, knowing, understanding, and acting, the different navigation routes can be illustrated. For instance, in the first step where professionals aim to gain knowledge the junior nurse spoke of relatives, colleagues and medical notes, whereas the HCA spoke of being close to the patient. For understanding knowledge, the HCA mentioned discussing it with a nurse, whereas the senior nurse mentioned to be consulted when a patient is poorly,

which suggested that they have a different level at which they are able to interpret knowledge about the patient. Regarding acting, the senior nurse spoke of doing medical reviews and to plan treatment, whereas the junior nurse focused on gathering and sharing information within the multi-disciplinary team.

Linked to the example of the HCA navigating the assessment process by asking a nurse for input, are hierarchy and specialisation, which have been addressed before in section 4.3.2.3 related to separating and prioritising care. Within the expanded team, assessments are escalated towards one another:

*'Yesterday the man I was looking after ... was wincing. ... I said: "Have you had a fall"? He said: "Not that I know off". I said: "Oh, I will let the nurse know about that".' (HCA 47)*

*'HCA ... says that she asked the nurses to have a look as she was concerned ... that the patient was not her usual self. ... The nurse now comes out of the bay and walks straight to the doctor.... She says: "She doesn't look very good" and she asks the doctor to come and see the patient.' (Field notes 8)*

This kind of practice reflects the different positions the professionals have in relation to the patient. It seems the 'lowest ranked' professional spends most time with the patient.

*'They [trained nurses] have to write their assessment at the end of the shift and they haven't been near that patient. Because they rely on us then to give them the feedback so that they then can actually put that information down. (HCA 1)*

*'It is just we [HCAs] observe more because we are with them more. The nurses do other things, so they are not with them [patients] so much.' (HCA 47)*

Not only HCAs noted this, but nurses made similar comments:

*'Sometimes you can't be everywhere, you can't see everything and they are sometimes your eyes ... sometimes I feel they are more nurses than us, sometimes I do feel that.' (Junior nurse 29)*

HCAs are the ones who have to be able to notice the things that need to be escalated. This often relies on an informal assessment process based on observation of the patient. Although HCAs are closest to the patients and therefore may be doing a large part of informal assessment, the qualified professionals are responsible for the care and the care

process, and therefore have to trust HCAs to notice and report important health related issues:

*'Well you have to trust them, you have to ... I mean, you know, they are the one who are there, they are doing the most of the patient care.'* (Junior nurse 24)

*'Because it is my pin number at the end of the day that goes against that job that they are doing, so yeah I need to be confident in their competences.'* (Junior nurse 30)

This shows how a multi-disciplinary team approach is closely linked to trusting and valuing one another:

*'Because it makes me feel I am involved ... it is like I am not like a person sitting there and totally blanked when the doctor walks in and talks to a patient.'* (Allied HCP 23)

*'Each discipline is respected and ... it is very rewarding and it is very refreshing. It is so nice to have a voice.'* (Allied HCP 53)

These quotations show the positivity from feeling valued. Other quotations showed the negativity from feeling less valued:

*'Whoever is thinking "what do they actually do ...". You feel like you have got to prove yourself.'* (Allied HCP 28)

*'It would be nice to be recognised that that is our job.'* (HCA 47)

Each discipline on this ward for older people has their own contribution to the care process and often assessment processes require the involvement of a variety of professionals. Working together within a network is required to keep everyone involved to the extent they need to be. In the following section the role of the nurse will be explored in further detail.

#### *4.4.1.2 The role of the nurse*

The role of the nurse in relation to the assessment process conducted by the multi-disciplinary team was prominently visible within the data. This section will address three aspects: (1) The centre of networking, (2) Nurses' perceptions on their role, and (3) The differences and similarities between senior and junior nurses.

## 1. The centre of networking

Within the theme 'Containing complexity', the three steps of assessment were presented. In step three the act of making treatments plans was addressed. The data showed how physicians and therapists make their own treatment plans and document these in their notes, whereas nurses were found not to make individualised care plans (See page 119). Instead they use predesigned standard care plans, which required a signature and a date on admission. Document review revealed a similar finding:

*'No assessment filled in by nurses despite the patient being highly dependent in nursing needs. Focus appears to be on medical issues, mobility, and social, but not on ongoing daily nursing needs.'* (DR Patient 10)

*'In this booklet no information on right sided weakness after CVA, which has great impact on patient's ability for independence and care needs .... On admission ... no mention of personal care needs.'* (DR Patient 11)

During interviews none of the nurses spoke of making a formal plan. A nursing or care plan, including a routine for personal care with for instance actions such as daily showers, or a daily plan for rehabilitation and enhancing self-care have not been found during document review. However, these could have a less formal shape, and exist in a more informal manner, mostly manifesting itself in the mind of the HCP during their shift. In addition, this type of personal care is often not given by nurses, but by HCAs who do not write notes, but rather fill in predesigned tick box documents in the bedside folder. The HCAs would mention their informal planning and sharing knowledge about personal hygiene needs, however this would seem to have a logistic nature focused on managing the activities that need doing, rather than presenting a treatment or therapeutic intervention:

*'So on the handover sheet ... I put myself 'pad checks', so I know when ... we need to change her pad.'* (HCA 34)

*'If I meet a new patient but the people that have been in there before like the night staff have been in there a couple of nights, and they have done a wash on that patient, then they will pass it on before they go.'* (HCA 47)

Formal assessments of hygiene needs are conducted by occupational therapists, who do washing and dressing assessments on which treatment plans are made for enhancing independence or future care needs.

*'So therapies do their assessments and then the discharge team kind of decide upon assessments as to where the patient is going.'* (Junior nurse 29)

In summary, it seems treatment plans are made by physicians, therapists and specialist nurses. The nurses appear to have a different role towards formal treatment plans:

*'So once the doctor has written it down, I just go and check that I have got the plan.'* (Junior nurse 30)

In this quotation a nurse focuses on being aware of the plans made by others, reading it once it has been made. In the field notes a number of quotations were found where nurses copied or read the medical notes in order to be aware of the plan:

*'Nurse now ... checking through medical notes, grabbing a set of notes to sit down at the desk and she seems to write the medical plan from the notes onto her white hand over sheet.'* (Field notes 5)

*'Before HCP 29 starts writing, he starts checking the medical notes while also having his handover sheet open and scribbling on it at times. HCP 29 explains he likes to check the medical notes to make sure he is up to scratch with the medical plan.'* (Field notes 16)

Being aware of what others are doing was mentioned by all professionals, but there appeared to be a different depth to the activity.

*'I think it is always part of a plan with geriatric patients. So your plan always has occupation therapy and physiotherapy in it. ... From my perspective, I guess, it is a job that needs to be done ... and that would impact on discharge really.'* (Physician 13)

*'So I speak to the therapy teams. ... We discuss everyone during board round ... and if they are there when I am seeing a patient I find them very useful to tell me where they are up to with it. But I am not very good at going and hunting them out unless it is a real stumbling block for us getting further on with the patient.'* (Physician 15)

These quotations show how physicians are interested in what others are doing, but mainly in relation to their own plans for that patient. Earlier in section 4.3.2.3, it was mentioned

that therapists only become involved once the patient is medically fit, therefore limiting their awareness of medical care apart from knowing when the patient is ready for therapy. During document review it was found how different HCPs were unaware of each other's progress:

*'Doctors keep saying 'ongoing therapy input', but therapy seems finished and it is more social input.'* (DR Patient 10)

*'Occupational therapist had written ... patient was discharged by therapies as back to baseline. The nurse had written this as well ... the doctor appeared to be the only one unaware.'* (DR Patient 16)

There is a difference between this kind of being aware of what others do, and being the centre of the networking team, focusing on gathering and sharing information to smooth the process along. This role seemed to be undertaken by nurses. Where nurses earlier were said to not necessarily create structured or written individual treatment plans, the data provided evidence of nurses aiming to focus on pulling together what others are doing. Especially handovers and documentation showed nurses monitoring others:

*'Nurses are occupied monitoring others. During the handover the nurse mentioned several times what the occupational therapist or discharge coordinator or physiotherapist was going to do, or had just been doing.'* (Field notes 14)

*'Nurses include actions from others in their writing, such as "washing and dressing assessment tomorrow", "seen by SALT [Speech and Language Therapy]", or "patient now on a different diet".'* (DR Patient 11)

Another finding may also underline the central networking role nurses seemed to have. Several observation sessions mentioned how each person walking onto the ward would look for a nurse first:

*'A lot of HCPs walk onto the ward asking where the nurse is.'* (Field notes 11)

*All these people walking in to see a nurse and leaving because she is not here, tells me how nurses are in high demand by everyone. They seem to be the first port of call, the centre of the system.'* (Field notes 12)

One observation session showed how a nurse works from interruption to interruption, constantly being addressed by other professionals needing her input:

*'Everything she has been doing since she started writing the notes is based on interruption after interruption. She seems very calm while doing it all, as if she is used to working this way.'* (Field notes 12)

During interviews with nurses this notion of being central to networking was also mentioned:

*'I think as nurses you do marry it together.'* (Senior nurse 17)

*'As nurses a lot of it gets fed back to us. We tend to know when the physios have seen them and what their outcomes are. We tend to know when the doctors have seen them and what the outcome is.'* (Junior nurse 30)

The vision created by these data excerpts, shows how nurses are a central point:

*'When you put the blue uniform on it is completely different. Everyone sees you and expects you to know it all.'* (Junior nurse 24)

*'See with the nurse you are in the middle; you are communicating with everyone. You are like the centre point, aren't you?'* (Junior nurse 29)

Nurses then use all the information they receive for several purposes including documentation, informing others, and to logistically plan care such as discharges and referrals to other professionals:

*'Notifications ... tend to lie slightly more in the nursing field of things. They know who has done it, whether it hasn't been done, and they are the ones who question it a bit more in board round.'* (Physician 15)

*'I have communicated with various different teams, whereas you know, the discharge team might not have communicated with the other team. ... You have patients who have been reviewed by cardiology, gastro, all sorts, and I have got that information, where they may not always know. So, it is like a centre point.'* (Junior nurse 29)

The activity of gathering and sharing information and being the centre of the networking system was summarised by nurses with the following term:

*'The nurse walks back onto the ward and asks the HCAs to do the observations, giving an explanation: "I have quite a lot of chasing to do".'* (Field notes 12)

*'Nurses ... carry the burden of a lot I think ... chasing people.'* (Junior nurse 7)

'Chasing' suggests an approach where the nurse is behind those they are chasing, which does not seem to be similar to coordinating care. Other HCPs were also not immediately thinking of the nurse when talking about coordination:

*'The nurse in charge is quite likely to know, but there is not someone who will definitely know for every patient ... finding out that information, because it is written in all different places and told to different people, so that means it can be harder.'* (Physician 15)

*'I am not sure anybody is trying to do that.'* (Physician 39)

Observation of board round showed the following:

*'Ward nurses are the ones who seem to have most comprehensive information, but they are not always listened to by others.'* (Field notes 13)

Coordination, or lack thereof, appears challenging for patients. They mentioned the difficulty in receiving information from the HCPs when a number of specialists and professionals are involved:

*'I have no idea who to ask.'* (Patient 8)

*'They don't talk to one another.'* (Patient 12)

*'I think there should be more cooperation between departments.'* (Patient 13)

In addition, on quite a few occasions participants received mixed messages:

*'I was having different information ... so eventually, I think ... the doctor was overruled by the neuro people.'* (Patient 8)

*'Physio had come and said we won't move you for two weeks, you will stay there solid flat. But the (doctor) said: "We are not waiting that long".'* (Patient 15)

## 2. Nurses' perceptions on their role

Although nurses seemed willing to fulfil their role at the centre of the networking system, they did mention how the amount of information could be overwhelming:

*'But the only thing I don't like is sometimes so many people can tell you things all at once and it is just a bit overwhelming.'* (Junior nurse 22)



*'Sometimes when you have got so many patients it is overwhelming trying to remember where twelve have been, who they have been seen by, and why they have been seen by. It is an awful lot.'* (Junior nurse 30)

During the focus group senior nurse 20 summarised the amount of information in one word, as she at times felt *'bombarded'*. This led to her mentioning everyone at times will reach their limit:

*'But you do get your saturation point ... you couldn't remember everything, there are things you have to document or you have to write lists, you know, because ... some days ... you have got everybody coming at you.'* (Senior nurse 20)

In addition, although this will be further addressed later in this chapter, nurses seemed to dislike the time they spent on documentation:

*'Everything is about documentation. And it is so frustrating. All we are actually here for. Sometimes, sometimes, I feel like I just been writing for the whole shift.'* (Junior nurse 7)

*'Sometimes there is so much paperwork that there are days where I just feel all I do is paperwork, paperwork, paperwork. And I actually physically don't do any patient care.'* (Junior nurse 24)

In section 4.4.1.1 in which different roles within the multi-disciplinary team were addressed, it was noted that HCAs were the ones providing most of the direct hands-on patient care as nurses focused on their networking activities. This does not mean nurses would not like to do more hands-on care:

*'Opposed to what nurses traditionally would do way back then, which is what the support workers do now. ... The power has just been sucked away ... I want to know my patients. I want to know what is going on ... I don't want to be out at the desk.'* (Junior nurse 7)

*'[During] the week there are so many people there, doctors, social workers, physios and all of them. It makes it busier ... sometimes you have to work with them, you have to go into meetings with them, they want you to do things. ... At the weekend they are all not there so it gives us a bit more time.'* (Junior nurse 22)

*'You are just kind of relying on your HCAs to do it all for you really. ... I would like to do more patient care.'* (Junior nurse 24)

*'During the week that is very difficult because you have got all the doctors around a lot more work is coming our way. But weekends ... you get that little bit of a calmer period where you can actually just get hands-on.'* (Junior nurse 30)

Several of these quotations address specifically how nurses appreciate time they can spent on direct patient care. Therefore, although nurses are active networkers, they continue to value an active role within hands-on patient care whilst acknowledging the limited time available to do so.

### 3. Comparing the position of senior and junior nurses within networking

So far, this section has combined junior and senior nurses, or band 5 and band 6 nurses. Senior and junior nurses seemed to work closely together at the centre of the networking system, with the senior nurse overseeing a full ward, and the junior nurse focusing on one area with six to twelve patient. An observation session of a handover between senior nurses summarised their main focus:

*'[The senior nurse] quickly summarises the empty beds, the ones they have a handover for and how many discharges. She then grabs a vital pack and mentions a few names of patients who are [scoring on their National Early Warning Score (NEWS)] ... . Then [she] turns to the diary on things that need doing.'* (Field notes 1)

This networking focus from senior nurses differs from junior nurses, which became clearer after observing a handover between senior nurses as well as from a junior nurse to a senior nurse:

*'I realise the difference of focus and depth in this handover compared to the one given by [the senior nurse]. ... [The senior nurse] ... has to hand over 42 patients and therefore focuses on the main things. ... [The junior nurse] gave a much more detailed handover on ... six patients.'* (Field notes 3)

This showed how senior nurses focused on bed management, taking into account the full ward as they concentrated on admission, discharges, poorly patients, and the main jobs that needed to be done that day. Although senior and junior nurses have a different position on the ward and subsequently a slightly different focus, both were found at the centre of networking, where they supported one another:

*'When I come in normally I look at the patients NEWS, see if there is anybody scoring ..., make sure there is a plan in place for that patient, do I need to escalate it. So it is more of a supportive role for that trained nurse as well.'* (Senior nurse 17)

*'You get the handover from the ward sister.'* (Junior nurse 22)

*'I know when I struggle, I go and tell them [senior nurses] I need help. ... They come and help with what needs doing.'* (Junior nurse 24)

Therefore, both senior and junior nurses were found at the centre of networking, supporting one another to gather and share information within complex networking processes.

#### 4. Summary

In summary, both patients and professionals highlighted the need for coordination of care within the complexity of the care of older people, but the efforts of the nurse to pull information together were not always valued as such. Instead, both senior and junior nurses focused on gathering and sharing information at the centre of the networking system and they used the term 'chasing' to describe it. Nurses spend most their time on networking. However, nurses seem to appreciate an opportunity to enjoy a more active role within the delivery of direct hands-on patient care.

##### 4.4.1.3 Verbal communication

Verbal communication between professionals could be divided into two different types. The data showed ongoing, ad-hoc, informal communication taking place, as well as formal and standardised communication. Both are further explored in this section.

##### 1. Informal verbal communication between professionals

In this section the ad-hoc verbal communication between professionals will be addressed, which is a continuous aspect of daily teamwork. It appears to happen in passing, and interrupting others seems to happen regularly.

*'The other day ... I ... walked past the desk and one of the nurses had come from somewhere else and she said: "Oh, Mr. Z has got a BM of 3.6, could I see him" ... so it was near the desk. But it was in passing.'* (Physician 13)

*'I kind of wander around to each area ... and in the process of doing that kind of lap on the ward, you bump into everything you need to find out.'* (Physician 15)

The key purpose of this communication seems to be updating one another on the patient or on logistics, as in what needs doing and who is doing it. Most HCPs perceive it positively:

*'I wouldn't say a lot goes amiss ... it is a very useful way of getting things across.'* (HCA 1)

*'It is useful to keep yourself updated, as updated as you can be.'* (Physician 13)

Some felt this kind of sharing information is a key aspect of getting to know the patient:

*'If I had to work on ward [number] this afternoon I would feel as if I knew nothing, because even if I have the list of patients and the activity I have to do with them, I am missing all the auditory information that is going on that gets me up to speed.'* (Allied HCP 44)

However, informal, ad-hoc communication between professionals also has its challenges:

*'When people ask me to do things when I'm ... doing something else, I often say yes and walk away and it completely goes in one ear and out the other.'* (Physician 15)

*'It works, but then sometimes you just need to be careful to see who is around. Because at the end of the day it is patient confidentiality isn't it.'* (Junior nurse 24)

The informal verbal communication is an ongoing process, showing the importance of the informal ways of working which was explained before in the theme 'Containing complexity'. Professionals use it constantly in order to stay updated about the ever-changing context in which they work.

## 2. Formal verbal communication between professionals

The more standardised verbal communication between professionals includes for instance board round, ward round, and handovers. The board round is a daily multi-disciplinary meeting, to identify 'poorly patients' and to keep the admissions flowing. At the time of data collection ward round seemed to be a medical review by physicians throughout the day. Handovers are meetings in which information is shared between professionals regarding a variety of patient related aspects. Grounded in the data, the purpose of these meetings can be explained as updating, rather than discussing:

*'We will go through all the patients and everyone will input where they are at with the patient. ... We can just all listen to each other in the board round and then we know where we are.'* (Junior nurse 22)

*'As the doctors continue ward round together, the nurse is around but does not appear to be a part of it. She continues writing, and seems to be available when doctors need her. They tend to need her mainly for short questions about the patient or to do a certain job.'*

(Field notes 8)

*'In the morning ... you get a handover from the night staff about every patient, what they come in with, the past medical history, what they are currently being treated for, and what are they treated with, and general plan really, mobility, skin ... and also any social history.'*

(Junior nurse 29)

Regarding the handovers, the amount of information that needs handing over comes with its own challenges:

*'It has been many a times ... it gets missed because they are trying to hand over so much.'*

(HCA 1)

*'Most of it does get handed over. Some of it does get lost because it is so much information.'* (Junior nurse 30)

Handover is therefore a crucial aspect of communicating information about the patient, whilst at the same time showing the overwhelming amount of information that needs to be shared between professionals.

Regarding the ward round, during data collection nurses did not attend the ward round due to logistical reasons:

*'We don't have enough staff to come around with us all morning ... because then they don't get to do their jobs.'* (Physician 13)

This is not to say professionals find this preferable:

*'So rather than me running around all day long, telling them ... what needs doing, doing ward round is much more easy.'* (Junior nurse 24)

*'If we had a ward round and the nurse was present ... surely we'd save everyone loads of time.'* (Physician 15)

When data collection finished for the study reported in this thesis, nurses started to attend ward rounds twice a week, aiming to enhance communication both within the multi-disciplinary team as well as towards the patients.

#### 4.4.1.4 Written communication

First a description is given of the documents which are in use on the ward. Then the focus moves towards professionals' experiences around documenting, and their experiences around using documentation as a source of information.

##### 1. Description of documentation

From the document review a description can be given of the documents in the medical and nursing notes. Each patient has medical notes in which doctors, specialist nurses, and therapists document, mostly on empty lined paper. In addition, the medical folders hold written records of therapy specific assessments such as kitchen assessments which are predesigned. Physicians usually free write an overview of the admission, patients' current state, findings from tests, bloods, or physical exams, and a plan. Each patient also has nursing notes in which nurses, discharge coordinators and sometimes HCAs write their documentation. The nursing notes holds several predesigned risk assessments, admission paperwork, several standardised and predesigned care plans and a daily report structured around eleven different care aspects. These medical and nursing notes are kept behind the desk for each ward area, often out of view for patients. Usually the medical and nursing notes are kept in two separate folders. In the last two months of data collection, a trial was started where all documentation was put in one folder. Junior nurse 11 summarised this practice:

*'They are still two separate things ... bundled in the same folder'.* (Junior nurse 11)

From interviews with professionals the content of the patient's bedside folder could be explained. This is a folder in which mostly HCAs document the hourly details such as fluid balances, daily skin check records, bowel charts, and rounding charts which are filled in regularly regarding care offered to patients. Overall, nursing and caring documentation seemed to include most paperwork, and appeared to have the largest amount of predesigned or tick box documentation.

Another form of documenting are the communication aids used by professionals, including white boards, handover sheets, and jobs lists. White boards provide 'overview information' of patient information such as mobility and social issues, and information on who is working in which area:

*'It is handy, instead of whipping your handover out all the time ... so it is easy quick information.'* (HCA 21)

These boards are continuously changed, and previous records are not retainable. They therefore could be seen as documentation with an ad-hoc nature. The only information it holds, is the information currently on it. This is similar for the handover sheets, which are used by HCPs:

*'It is an A4 sheet of how your patients are like.'* (HCA 1)

The main issue seems to be their update status:

*'There is a handover sheet ... sometimes it is updated, sometimes it is not.'* (HCP29)

Handover sheets, if updated, can provide overview information similarly to white boards. They are easy to carry around and are often combined with jobs lists. Jobs lists seem to have key role within logistical planning as they hold a number of activities that need to be done, see also page 132.

## 2. Professionals' experiences around documenting

Documenting appears to be a skill that needs to be learnt over time. While the aim is to be concise, there is a fear of being incomplete:

*'I like to make sure I have got each aspect and area covered ... I know I need to try and condense what I put, but still have the same amount of detail.'* (Junior nurse 30)

*'I am frightened of leaving something out ... I got a bit better now ... you can condense it to a little bit.'* (Allied HCP 36)

The balance between too much and enough seems to be a fine line. Litigation and justification possibly providing a reason behind this balancing act, and this topic is addressed in more depth later on in this section. Professionals did mention how they felt documentation was taking more time than they wish it would, see also section 4.4.1.2 where nurses reflected on their role. The focus on documentation appears to interfere with focusing on the patient:

*'So you know that patient has fallen: "Right where is there risk assessment forms, has that been done?" ... And then you sort of think: "hold on, this patient has just fallen on the floor*

*and I am worried about filling in a risk assessment form". But it is the way we are trained, it is the ethos of the hospital and the NHS really.'* (Junior nurse 30)

*'But then you are losing what nursing is about, which is looking after the patient, it is caring for the patient. It has just gone down the pan because of all the documentation.'* (HCA 47)

Another aspect of the experience of documenting is around overlapping and duplicating activities. For instance, professionals copying paperwork, overlap between standardised assessments, and rechecking documentation from a colleague with the patient to make sure it is correct:

*'When I will be doing my writing today about the patients I would write ... about their fluid intake. Which we already have a fluid balance chart for. So we are literally repeating ourselves.'* (Junior nurse 7)

*'And a lot of the assessments are replicated. ... A lot of the questions on the nutritional assessments could be covered under a Waterlow assessment.'* (Senior nurse 27)

*'But I would read those notes, probably speak to the nurse because they have had a handover as well. Um, go and see the patient, examine them, have a chat to them, see if their history matches up, is there anything we have missed or that we have got wrong.'* (Physician 13)

Another way of duplicating documentation was by redoing the assessment altogether, for instance, discharge coordinators and physiotherapists both reviewing mobility independently:

*'We have to do that; we have to have the evidence ourselves. But I do liaise with them.'* (Allied HCP 28)

Overall, the experiences professionals shared around documenting showed they would prefer for it to be less time-consuming and involve less duplication. Nonetheless, documentation is an important part within networking, as will be explored in the following section where the use of documentation as a source of information is presented.

### 3. Documentation within the professionals' network

Documenting is one thing. Using it is another. In the data two purposes of documentation were found, one was related to day-to-day process and another was related to litigation.



*'Sometimes you don't always get the best handover. So you do have to look back. ... If I document it, the nurse tomorrow will know. It is very simple and very much needed.'*(Junior nurse 29)

*'I think a lot of paperwork is just surrounded by litigation. ... We are writing it down so that everyone knows that we have done it ... I think that they have made it so that we have to write it down to back ourselves up really.'* (Junior nurse 7)

Within the day-to-day process nurses read the medical notes to remain up to date with the medical process, as was also explained earlier in section 4.4.1.2 focusing on the role of the nurse within the multi-disciplinary team. Several professionals mentioned the documentation in general as a source of information within the first step of the assessment process, as explained in section 4.3.1.1. However, nursing notes, despite including the highest quantity of documentation, seemed less used by professionals:

*'I do sometimes read the nursing notes ... I don't find as much content to it, so I will generally read the medical notes.'* (Senior nurse 27)

*'Maybe the nurses are reading medical notes, but we are not reading the nursing notes as much as perhaps we should.'* (Physician 39)

In day-to-day practice written documentation is often used in combination with verbal communication which is not always documented. This seems due to the nature of constant changes which cannot be followed if a professional relies only on paperwork, or because HCPs feel they need to 'double-check' the knowledge:

*'This place is notorious for people not reading ... I do both. I verbally hand it over to the nurse in the area ... and write it in the notes.'* (Senior nurse 14)

*'But me personally I like to ask as opposed to just read. I don't rely on what is written.'* (Allied HCP 53)

Regarding the use of documentation in relation to litigation, the data showed numerous statements around the need for evidence within health care practice:

*'But when they went to court and it wasn't written down, it hadn't been assessed, it didn't happen.'* (HCA 1)

*'Cause if you haven't documented it, you haven't done it, as they say.'* (Junior nurse 24)

Overall, documentation is important within the networking system of professionals. It is a formal way of working, in which a record provides evidence of the patient's process. Each discipline has their own documents. Professionals, especially registered nurses, mentioned the vast amount of documentation that needed to be done during a shift, as time spent documenting could not be spent on other activities, such as providing direct patient care.

#### 4.4.2 Networking between patients and professionals

When exploring networking between patients and professionals, the focus is on how HCPs share information with, or update the patient on what is going on regarding their care process. Then a more intense type of networking is presented related to the patient's involvement within the decision-making process regarding their care and treatment.

##### 4.4.2.1 Professionals updating the patient

Professionals were found to steer the navigating process, which circles around knowledge of the patient. The role of the patient, as grounded in the data, was found to be relatively passive. Within the first step of assessment, one of the possible ways in which professionals gained information about the patient was for a patient to provide it themselves.

*'Well I have had the doctors ... asking me what [kind of medication] I have been on in the past.'* (Patient 4)

*'Especially the consultant, he said "who is at home to look after you" and then "is my husband able to cope".'* (Patient 9)

In the third step of assessment in which professionals were acted on the knowledge they gained, professionals updated the patient and provided information on what was going on:

*'HCP 19 walks in and asks after patient's visit to the fracture clinic. He ... informs her that she has more appointments at the fracture clinic tomorrow ... the communication ... was quite short and HCP 19 was mostly speaking/informing and the patient was listening.'* (Field notes 2)

*'I think it was yesterday afternoon when she [physician] came and told me I was going to have this procedure done on Friday. But she couldn't tell me anything beyond the procedure, so I don't know about that yet.'* (Patient 8)

This shows how the patient feels she was 'told' about having a procedure, and the quotation suggests she does not have all the information required to make a well-informed decision. This identifies a passive role where the patient is being informed rather than being involved.

Patients' shared different opinions regarding the way they were informed and updated regarding their care process:

*'The doctor took very much time in explaining and telling me what was going to go on.'*  
(Patient 9)

*'I never know what is going on. I mean, I have had the scan last night, I was told after the scan I could go home. ... I am still lying here and I haven't got a clue.'* (Patient 12)

*'That is one thing I find rather, perhaps distressing isn't the right word ... I don't really think they keep you informed as to what is going to happen as well as they could.'* (Patient 13)

When comparing these statements throughout the patient data with individual health and social needs, it seemed those with less complex needs were often quite happy with the information shared by professionals. These patients usually had one reason for admission to hospital, a short medical history and were mostly independent. Those who presented with more complicated needs due to multi-morbidity, frailty and disability seemed to prefer more information than they received.

The data from professionals showed how they usually spoke about updating the family rather than the patient. This might be due to the high number of patients with cognitive impairment on this ward. Although formal family meetings were held on the ward, within the HCPs data the examples focused mainly on ad-hoc communication with family members:

*'But if family comes to visit then we will take the chance to go and speak to them, and they often approach me as well by saying: "How are things going medically".'* (Physician 13)

*'I mean if it is a complicated patient, which I feel that the family need to speak to doctors rather than me ... I usually advise them that, you know make an appointment with the doctor.'* (Junior nurse 24)

Although updating family may have an ad-hoc nature, it may require a more standardised preparation with medical or nursing notes as a source of information:

*'Say as I am talking to family and I just need a recap ... I'll use the notes for that.'* (Senior nurse 17)

*'If I am going to speak to relatives, because they always want to know about the discharge plans, that would be if I haven't already picked up from board round, then I would start hunting through the notes a bit more.'* (Physician 15)

Updating a patient and their relative represents professionals providing information, and the patient and their relative receiving it. Different views were shared by patients regarding the extent to which they felt they had been kept updated throughout their process. In the next section the emphasis will be on a more intense type of networking between professionals and patients, in which the patient is involved in the decision-making process around their care and treatment.

#### *4.4.2.2 Involving patients into the decision-making process*

This section is best started with two quotations from participating patients:

*'I think, this isn't my body, well, it isn't for a few days now, because it is theirs.'* (Patient 9)

*'If you are a patient, you want treatment, you grin and bear it.'* (Patient 11)

These quotations seem to suggest that patients feel they have to rely on professionals who are seen as the ones *'who know best'* and are in control of the patient. It suggests that patients are not actively involved in decision-making around their process of care, and points to the importance of trust between professionals and patients. In relation to this, both professionals and patients acknowledged the need for safety and care:

*'They are so caring, they treat you as if you are their mother, or their grandma, a member of their family.'* (Patient 17)

*'If something is not good enough for your relative, it is not good enough for your patient.'* (Physician 39)

Building trust is embedded within the process of building a relationship. Getting to know one another was seen as an important aspect of this process, although this was often challenged within the context of busy ward life:

*'We get to know someone and then you don't see them again for a while.'* (Patient 11)

*'By the time they have done the washing and are in a sort of hurry to get to the next patient. .... They are away like a shot.'* (Patient 13)

*'You don't get the chance unless you are doing personal care or feeding someone. They are your main times to have a chat ... It is a shame you don't get to spend more time just to have a chat.'* (HCA 21)

Another patient linked getting to know people to feeling safe and being able to trust them, as professionals would be aware of changes in health status. This quotation also provides an example of an informal assessment process as an important part of knowledge gained about the patient:

*'Because I suppose if you stick it out ... then it is easier to get to know people. ... You know whether they are a bit off colour or they are just having a bad day, or whether something is really wrong with people.'* (Patient 10)

Despite the focus on professionals making decisions, and patients needing to trust them, it is not to say patients would not like to have more input. However, not every patient would like more input. The following quotations show the different preferences presented by patients:

*'I know nothing about medicine so I can't really say what is right and what is wrong. And I know they are doing their best for me.'* (Patient 7)

*'I know what I want ... and I am saying what I want. Whether it is possible or not to get it ... we shall see.'* (Patient 10)

*'I personally would like a bit more say, but you look around you, could he say anything? Or that chap there, or that one there? I don't think they would.'* (Patient 11)

The first patient is happy with professionals making decision for her as she feels they have greater medical knowledge. The second patient stated he voiced his needs and wants, and the third patient suggests he would like more input.

Professionals commented on patient involvement, showing further insight into the process of decision-making within the navigated assessment process:

*'I don't ask whether they want the X-ray or not, I tell them that they need this X-ray .... And if they say that they don't want it, then of course that is different. But most of our patients "you are the doctor, you do whatever you think is right".'* (Physician 39)

*'We are very overprotecting. ... We want to get them all these bits of equipment that quite frankly they will never use. ... They have always walked while holding on to the furniture, they will continue to walk by holding on to the furniture.'* (Senior nurse 27)

To involve the patient into decision-making could lead to different opinions of the professionals and the patient:

*'The consultant says "... what do you see as the outcome ...". I say: "well I want my knees mended, I want to go home". ... He heard it, but he didn't want to hear it because ... I don't think he thought that was a possibility.'* (Patient 10)

Observation in the field provided examples of medical plans being made before the patient was seen by the professionals:

*'They decide patient needs to be referred somewhere. They call it the plan, and are thus making a plan while not yet having seen the patient.'* (Field notes 9)

Both patient 11, who pointed to his fellow patients, and physician 39 above noted how some of the patients seem to need or want the professional to make the decisions. Overall, the data showed how most patients liked to be well informed at least, with some of them preferring a more active role within the decision-making process than others. Some of the patients were happy with the communication during their admission, others felt it could have been done better.

#### 4.4.3 Summary

In this section the theme of 'Networking', as part of the social process of navigating assessment has been presented. It included both networking between professionals of the multi-disciplinary team and networking between professionals and patients. The multi-disciplinary team was found to include a large number of people, whom focus on their own area of expertise. Communication focused on updating one another rather than discussing patients and their care. Nurses were found to spend most of their time gathering and sharing information at the centre of the networking system. Most hands-on direct patient care was provided by HCAs, who therefore played an important role in

observing and informally assessing older people. The role of the patient appeared to be passive as they are updated by professionals, but are usually not a part of the decision-making regarding their care and treatment. Not every patient would like to be involved in a similar manner regarding their care process, with some being happy with regular updates, and others preferring a more active role within the decision-making process regarding their care and treatment.

## 4.5 Theme: Situating the process

Table 7, Codes within theme 'Situating the process'.

Theme	Codes	Sub codes
<b>Situating the process</b>	Meeting individual patient needs	Individualising patient care
		Assessing patients with cognitive impairment
	Daily ward life	Practicalities
		Practice guidelines

Navigating the assessment includes a third theme, which is 'Situating the process' (Table 7). This focuses on how each assessment needs to be tailored to its context, including the patient who is to be assessed, as well as the practical daily ward life professionals have to negotiate on a day-to-day basis. These aspects are presented in more detail in this section.

### 4.5.1 Meeting individual patient needs

#### 4.5.1.1 Individualising patient care

Not every patient is the same, and each individual has different care needs:

*'So it is getting to know them. Because every one of them are different.'* (Senior nurse 10)

During the focus group this was discussed in particular in relation to the third step of assessment, which was acting based on knowledge gained about the patient:

*'Acting ... is contextual .... We may have to do something, but it will be slightly different from patient A, from patient B, on the same assessment.'* (Physician 39)

These individual patient aims and needs in relation to navigating an assessment, were regularly mentioned:

*'The patient may not be back to baseline ... but sometimes you weigh up all the evidence and all the knowledge you have got and you don't put them through rehabilitation*

*because it is not the right thing when you way up all the different sides of the argument.'*  
(Allied HCP 44)

*'People with basically hypoxia when they look at the oxygen saturation of 88, a newly qualified nurse will always go for the oxygen. But a slightly higher category of nurse will ask "does this patient have COPD, is this 88% the new normal for this patient"?' (Physician 39)*

The individual patient state also influenced the timing and the content of an assessment:

*'So always protect the patient by just asking ... "Is there any reason why I shouldn't be seeing them?", "Actually yes" ... and then like "OK, I will leave them be".'* (Allied HCP 53)

*'If I know they are from their own home ... I can ask them a little bit about how are they coping at home. ... If they are in a nursing home ... I might not ask them so many questions about that.'* (Physician 13)

Sometimes this led to discussions in which professionals have to reach common ground together:

*'I would challenge a doctor, if I didn't agree. ... I felt like a patient had deteriorated and they had to be on end of life but the doctors were continuing with treatment ... I would say "I don't agree, I don't think that is the right thing to do".'* (Junior nurse 33)

*'I am not afraid to stand up for that person and say "I don't agree ..." even if it is in a multi-disciplinary team meeting, if it is the board round in the morning, if it is to staff, the relatives.'* (Allied HCP 53)

These quotations showed how assessment could be differently navigated based on the context of the patient's individual situation where aims and needs are person specific.

#### *4.5.1.2 Assessing patients with cognitive impairment*

Especially assessment of those with and those without cognitive impairment was mentioned as an important influence on navigating an assessment process. The assessment process for these two groups appears to differ according to professionals. They require a differently navigated route:

*'I think facial expression say a lot with people that can't express other ways.'* (HCA 1)



*'There are people at the extremes ... like they are clearly dying when you first see them. The visual assessment can tell you far more than like a few one-word answers you might be able to get out of them. And then people who look well, but ... think they are in a hotel and that it is 1997, you know, it is going to be a lot more verbal trying to work out is this dementia, are they delirious, how much of this is new and old.'* (Physician 15)

Senior nurse 14 summarised assessing patients with dementia as follows:

*'You have to take your time and you have to not rush them and you have to leave them do the leading really. Because they will soon make it clear they are not going to talk to you if you rush them or appear a bit bossy.'* (Senior nurse 14)

In addition, information is gathered via others close to the patient, either family or professionals, when patients cannot provide information themselves:

*'So I rang the nursing home where she came from.'* (Senior nurse 14)

*'If the patient can tell us that is fine. If they can't ... then we ... can call the family.'* (Allied HCP 36)

Each navigated assessment process is therefore tailored around the specific cognitive abilities and needs of the patient who is assessed. Unfortunately, this aspect of assessment practice on a ward for older people could not be explored from the perspective of the patients with cognitive impairment and their relatives, as the ethics committee advised to exclude these groups from the study.

#### 4.5.2 Daily ward life

The context includes not only the individual patient who is being assessed, but also the daily ward life, which had an impact on navigation of an assessment on the ward. Two aspects were found in the data, including practical issues such as time limitations and availability of people, and requirements of the health care system.

##### 4.5.2.1 Practicalities

The availability of professionals steered the navigation of an assessment:

*'It depends ... how busy the ward is and where the nurses are. But if there is someone there I would try and ask them if there is any nursing concern to that patient, but as always, that doesn't always happen.'* (Physician 15)

*'As soon as you see the nurse you are like: "Oh quickly, I have got to tell you this before I forget". ... Because if she is on break or she is not around or anything I just write on my handover so that I remember to tell her later on.'* (HCA 21)

These examples show how the availability of other professionals may influence the immediate action of sharing information and communicating amongst individual professionals. In the first example the participant seems to suggest that if the nurse is not there, communication does not happen, whereas in the second example the HCA talks about a delayed communication. In both occasions the navigation of assessment is influenced by the practical issue of staff availability.

Time and heavy workloads were also mentioned practicalities which influence the way professionals navigated the assessment process:

*'If the patient has been seen by ... speech and language therapist, and they have said that they shouldn't be taking any fluid or diet, and they don't actually ... tell me, well then there is a risk that I don't actually look in the notes until lunch has passed.'* (Junior nurse 7)

*'We try to do it when we have got time that me and the nurse will sit down and ... make sure that we have got the same things written down .... But we don't always get a chance to do that.'* (Physician 13)

The first example shows how the nurse needs an informal verbal message as the formal written documentation might not be read in time. The second example shows verbal communication is sometimes under pressure, which was also mentioned concerning the board round:

*'Some days it is quite a lot of people in there ... sometimes we can't get everybody together because everybody is busy.'* (Senior Nurse 20)

Therefore, the resource of time seemed limited and this influenced how an assessment was undertaken. Time was highlighted as an important resource in order to conduct and navigate assessments:

*'It is having the time to sit with the patient to make sure we get everything, all the information, have that time to ... be able to really know the patient.'* (Senior nurse 20)

Examples of time constraints have been presented previously in section 4.3.2.4 in relation to prioritising and separating care processes into isolated tasks. As addressed in section 4.3.3, time limitation was linked to a high pressure on the beds:

*'The big priority is to get people out quickly.'* (Senior nurse 14)

This priority focuses on making sure the processes in hospital happen as quickly as possible, including the assessment process.

#### *4.5.2.2 Practice guidelines*

*'At the end of the day, this is the hospital guidelines, this is how you are supposed to [work].'* (HCA 1)

Another aspect of daily ward life found in the data, involves the care requirements according to the guidelines used by the NHS, also referred to by HCA 1 as *'how we are supposed to work'*. The following examples show how standardised practice guidelines influence assessment practice, especially in relation to the more formal and documentation related approach to assessment:

*'You need the normal standard stuff, like diet and nutrition that have to be in, and your skin assessments have to be in, and bowels have to be in.'* (HCA 1)

*'We have to see them every day. That is the hospital ... so they get seen every day by a medic. So I will see them as a daily review.'* (Physician 13)

Another example of standard practice is when two junior nurses explained that the risk assessments were updated weekly for every patient, also showing the NHS guidelines requirement regarding this:

*'It is assessed weekly at the weekends.'* (Junior nurse 22)

*'We write that in weekly though, their weights and whether they have lost or gained weight with us.'* (Junior nurse 30)

The existing assessment documentation in itself is based on guidelines. A large part of the documentation is predesigned paperwork, such as the risk assessment booklet, the admission booklet used by the nursing team, as well as predesigned documents for therapists. When looking at the nurses' documentation regarding day-to-day issues, it was mentioned before that they were found having to use an eleven-point system:

*'Nurses use a number system in their documentation where each number links to a certain aspect of nursing such as breathing and mobility.'* (DR Patient 1)

*'What we normally do on the ward, most of the nurses, if like on a morning shift we normally use all the numbers because normally you cover everything. However, if you are on a late shift I would skip out a few of them like hygiene.'* (Junior nurse 22)

In a similar way, risk assessments add up to scores, which lead to standardised and guideline-dictated care actions:

*'It is scored. If it is not 3 do this, if it is 4-6 do that. ... It has taken away some of that responsibility for decision making.'* (Senior nurse 27)

*'So, if the Waterlow is high we need to be ordering their mattresses. Same with the nutrition, if their nutrition score is high then we will refer them to dieticians.'* (Junior nurse 30)

Actions taken based on assessment in this practice is based on NHS guidelines before clinical judgement. These examples show how the guidelines used within a care organisation lead to a certain standardisation of care, influencing the navigating process of an assessment.

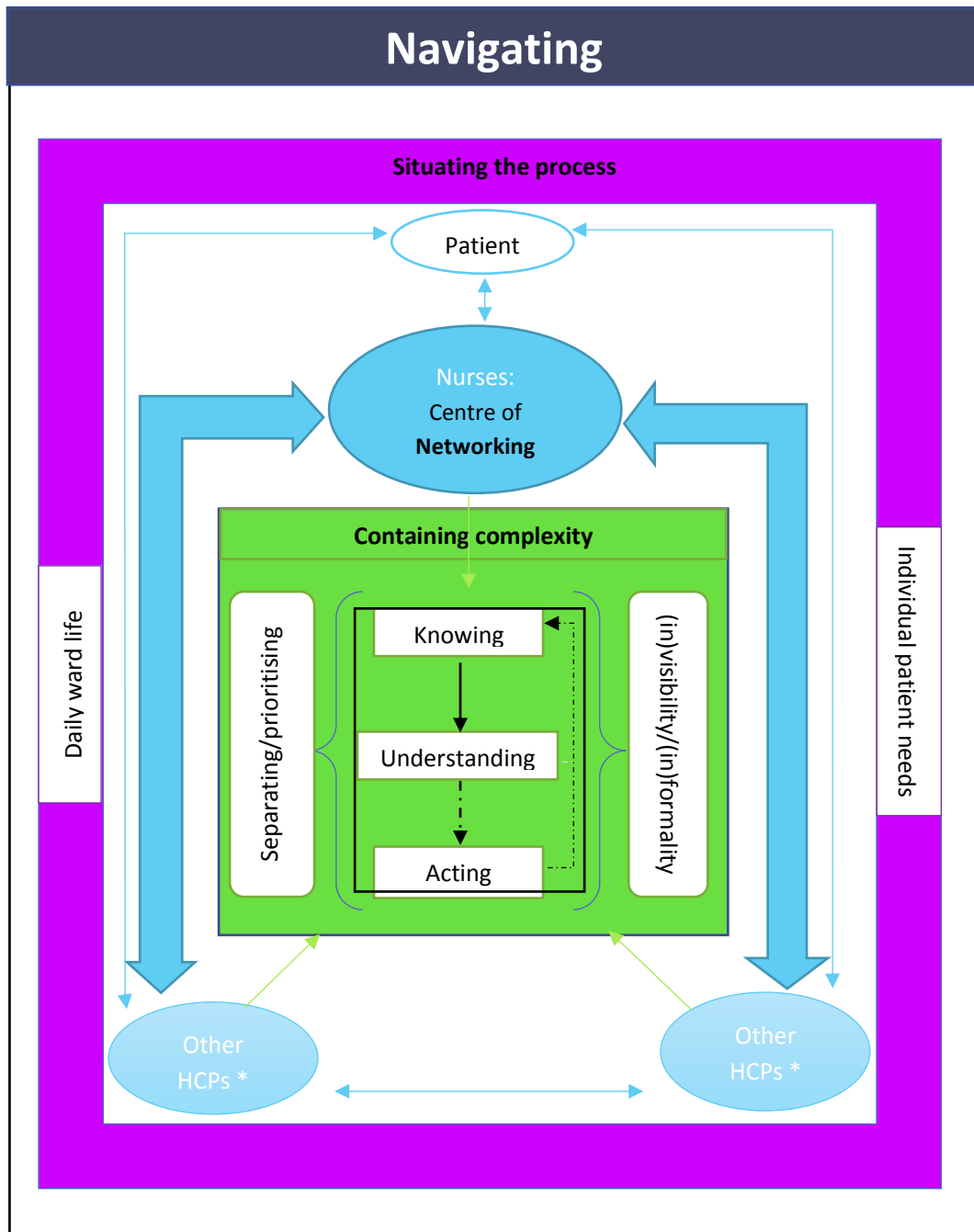
#### 4.5.3 Summary

In this section the theme 'Situating the process' was presented. It showed how practical aspects influenced the navigating process of an assessment. These aspects included the individual patient needs and daily ward life, which was divided into practicalities such as availability of staff and time, and NHS guidelines which are followed by professionals when assessing older people.

## 4.6 The core category 'Navigating'

### 4.6.1 The conceptual framework 'Navigating'

Figure 3, Conceptual framework of 'Navigating'



\*Includes a number of disciplines such as physicians, therapists, therapist assistants, nurse specialists, HCAs, activity coordinators

- Theme: Containing complexity
- Theme: Networking
- Theme: Situating the process

As explained at the beginning of this chapter, the three themes of 'Containing complexity', 'Networking' and 'Situating the process' led to the core category 'Navigating' (Figure 3). With the in-depth exploration of the key themes in previous sections, this section will summarise these three themes in relation to 'Navigating, after which this core category further explained.

The framework presented in Figure 3 shows the interlinking nature of the core category 'Navigating' and the three themes 'Containing complexity', 'Networking' and 'Situating the process'. Navigating was defined at the beginning of this chapter as a context dependent, social process, in which each assessment can be conducted in a different way. It encompasses extensive networking involving professionals and patients, and professionals contain complexity through using formal and informal, visible and invisible ways of working, as they prioritise aspects of care with the aim of meeting competing demands.

In the middle of the framework the theme 'Containing complexity' (in green) is situated, showing the three basic steps of assessment which are knowing, understanding and acting. The dotted arrows show that acting is a potential step and is not always used as professionals may feel action is not needed. In addition, dotted arrows from step two and three back towards step one show that the process can be repeated. The elements of the three steps are embedded in different ways of working, which are presented around the three steps and include informal and formal, invisible and visible ways of working, as well as a separating and prioritising approach to care. Green arrows connect the different professionals with 'Containing complexity', showing they are the ones undertaking this aspect of navigating.

Surrounding the theme 'Containing complexity', is 'Networking' (in light blue) including patients and professionals. Within 'Networking' the blue arrows represent the communication between health care professionals and between professionals and the patient. The large blue arrows between nurses and other professionals represent how nurses focus on sharing and gathering information within the multidisciplinary team. The nurses' oval is the largest and most coloured one, compared to other professionals and the patient, to represent band 5 and band 6 nurses at the centre of networking. The thinner blue arrows represent communication taking place between different professionals and between professionals and the patient. However, this has a lower

intensity than the networking activities towards and involving nurses. The patient's oval is colourless, small, and positioned on the outside of the process, representing their more passive role.

'Situating the process' (in purple) focuses on how the navigating process of an assessment is placed within its context, and it is therefore drawn around 'Containing complexity' and 'Networking'. It includes the two aspects of daily ward life and individual patient needs. This represents how the contextual aspects surround each process and influences the navigation process.

#### 4.6.2 The core category 'Navigating'

Navigating as the key social process of assessing older people was found grounded in the data. Due to the complexity of the process, constant networking, and the way assessments are situated in a specific context, assessment is not a straight forward, standardised process. Instead it is complex and context dependent, with professionals navigating each assessment process.

When the core category of 'Navigating' was found in the data, the researcher wrote a memo in which to further explain the process:

*'Each bit of knowledge about each patient gained by a professional can be seen as a boat on a river. Let's call this boat 'assessment process'. This boat leaves from a place we can 'initiating'. This is where the sailor, a professional, decides he or she should gain some knowledge about the patient. There are three harbours called 'knowing', 'understanding', and 'acting'. The boat first goes to 'knowing' where there are three platforms where the boat can more. These are 'observing', 'hearing', and 'reading'. Each harbour has their own platforms which the professional can chose to use in their travels towards their destination to a town called 'Job-done'. There are several houses in Job-done, which represent the number of destinations that professionals might aim towards, such as providing safe care, provide evidence of practice, or being respected by their peers. ... Each boat represents a piece of information about a patient, it does not represent a full comprehensive assessment. This means the river is very busy and full of boats. For instance, one boat may be steered by a doctor trying to get sort out a low blood pressure, whereas a HCA may be steering another boat trying to figure out the patient's toileting needs. In addition, professionals may be standing on the different platforms, for instance colleagues may be standing on platform 'hearing' in harbour 'knowing', or nurses may stand on platform*

*‘coordinating’ at harbour ‘acting’. This illustrates how professionals are constantly involved in different streams of patient knowledge for each patient they look after. This results in a complex situation and the need to be in different places at the same time. Patients are standing on the platforms or sometimes even further away. The usually are present in harbour ‘knowing’ where they may provide a professional with information, but they may well lose sight of the boat as the professional sails off with the information, making the patient a bystander of their own knowledge.’ (Field notes 20-5-16)*

These fieldnotes show the process of assessment and addresses that the professional is the one navigating the assessment process and the patient having a passive role, see also section 4.4.2. Navigating, therefore, is a professional-led process in which knowledge about the patient is gained, understood and, if needed, acted upon.

At the time this analytical field note was written, the destinations of a navigating assessment were linked to the competing demands, which were explored in section 4.3.3. Each professional who navigated an assessment aimed to meet these competing demands, such as safe patient care, accurate documentation, and being a valued member of the team. Additionally, this section addressed who set these destinations, such as the focus on documentation and quick discharges being related to organisation-related destinations. However, a key destination could be seen in relation to the three steps of assessment, which means this specific destination is reached when knowledge has been gained, understood and, if needed, acted upon. In summary, destinations can be multiple and may differ depending on the context in which the assessment takes place.

In the following section, specific excerpts of data are analysed to highlight and further clarify the navigating assessment.

---

#### Example 1

*‘I went to bed, I have got this awful pain in my stomach which I have had all day ... I think it is hernia ... but the day care nurse came and ... I said, “I don’t feel very well”, so she said, “I’ll just give you two co-codamol, see how we go” .... And this morning they said, “Oh the doctor was going to see you”, and just before she came, one of the doctors ... “So, what can I do for you”, so she started examining me. ... She said, “I don’t think there is anything to worry about ... when the consultant comes to see you about your back, I will have a*



*word with him and tell him at the same time". So now I am waiting to tell him about the pain.'* (Patient 17)

---

In this example two professionals, the nurse and the doctor, navigated an assessment process. Within 'Containing complexity', the three steps of assessment were found as follows. Both professionals gained information from the patient about her pain, and they understood that the pain should be taken seriously. The nurse acted by aiming to fix it with analgesia. The physician acted by conducting a physical examination and mentioning it to a senior colleague. These steps included formal ways of working, such as the physical examination, and informal ways of working, such as the physician mentioning it to a colleague. This conversation with a colleague might happen invisibly to the patient, whereas most other aspects of this example seemed to have been visible to the patient. The destination of the navigating process by the nurse seemed to focus on resolving the pain and comforting the patient, whereas the physician seemed to focus on finding the source of the pain as well as comforting the patient.

Regarding the theme 'Networking', the patient gave information about the pain to both professionals and she seemed to feel listened to. Both the nurse and the physician appeared to have provided enough information to the patient for her to know what is aimed for and what is going on. It showed how the nurse networked with the patient, and the doctor networked with both the patient and a senior colleague. The patient's role focused on providing and receiving information. Decision making seemed to be done by the professionals.

The theme of 'Situating the process' is found in, for instance, the availability of a senior colleague later that day, which meant the process is on hold until then. In addition, the patient's individual characteristics were taken into account as this patient was able to voice her own needs and was taken seriously in her complaint.

---

#### Example 2

*'This lady came in and I said, "could I have a shower please" [...] And she said, "of course". Anyway, she goes out, comes back in all kitted out and I thought, I said to her, "I am alright on my own, I can manage, I am fine, I am independent". I was in there like a shot, and she showered me down, and washed my hair and everything, um, so I said, "oh thank you ever so much for that". But the next morning I was up really early and I got in there and I was*

*showered. [...] Maybe she wanted to look at me [...] something to do with the skin, but I know she went outside and then they said, 'have you checked', and she said, "I have checked and it is fine". [...] And I thought, "aha, that is why she took me in there and gave me a good dressing down".'* (Patient 9)

---

'Containing complexity' in this example could be seen in the three stages of assessment knowing, understanding, and acting. The patients provided knowledge, which was not fully understood by the professional as she acted by providing assistance despite the patient being independent. The different ways of working could be seen in, for instance, the professional aiming to do the assessment of the skin invisibly, and the communication between the professionals appearing to be informal in nature.

The 'Networking' process in this example showed the professionals communicating with the patient to gain information. Additionally, the patient seemed uninformed about the reason why she was assisted with the shower. The communication that took place between the two professionals was explained from the patient's point of view. The role of the patient within networking appeared to focus on providing information, and in this situation it is not fully taken into account by the professional.

The skin assessment is a daily requirement in the NHS guidelines regarding skin care, and is therefore part of 'Situating the process' into the context of daily ward life. This shows a discrepancy between the individual patient needs, as the patient wanted to shower independently, and the need for the professional to review the skin.

---

#### Example 3

*'We have got someone ... that is normal diet but she has got no teeth, so she doesn't manage a normal diet. So, I spoke to the trained and I said: "I think she would be better off with fork mashable" and they are like: "Yeah fine". Because fork mashable is just a softer version of a normal diet. You can't necessarily go from a patient being normal diet and then say putting them on puree, it doesn't work like that, they have to have a SALT [Speech and Language Therapy] assessment. If they are coughing and things like that and I was really worried about them, I'd say "Put them on diet". If they are coughing on diet and fluids and you are concerned about them I would go back to a trained and say: "They are really choking on that", and nine times out of ten the result will be to put them nil by mouth until SALT will get to see them.'* (HCA 1)

---

In this example a HCA observed the difficulty a patient had with a normal diet. The three steps of the assessment process, as part of 'Containing complexity' could be elicited. Gaining knowledge was done informally, and potentially invisibly, by observing the patient. The HCA also spoke about talking to a trained nurse, which could also be done informally and invisibly to the patient. In regards to understanding the knowledge that was gained about the patient, the HCA felt that the patient was struggling with her food and this was not as it should be. Acting was explained in a variety of scenarios, including changing the patient's diet, informally speaking to a trained nurse, and formally referring the patient to a speech and language therapist for an in-depth assessment. The destination of the navigated assessment processes all seemed to focus on patient safety, as well as following the hospital guidelines as appropriate.

'Networking' was an important aspect as it seemed to happen between the patient and the HCA, as well as between professionals, including the HCA, a nurse, and speech and language therapists.

The HCA seemed to follow an 'approved' formal route of care, which can be found in how she stated, 'it doesn't work like that'. This suggested a way of how things are usually done according to the requirements of the NHS guidelines, which was an aspect of 'Situating the process'. In addition, the HCA focused on the patient's individual abilities and needs as she navigated the process of assessing dietary needs.

---

#### Example 4

*'We use the AMT test, the abbreviated mental test. [...] That is five questions, isn't it? We do that initially on most patients, so when I am seeing a new patient clerking them in, I do that. And sometimes, during one morning assessment I would use the AMT for a few patients, depending on how they are. If nurses said to me she thinks someone is a bit more confused than normal we can do that or we can do the longer AMT which is ten questions.'*  
(Physician 13)

---

Physician 13 suggested an 'if this, then that' navigating approach, including a number of scenarios or routes. Regarding the category 'Containing complexity' the three steps are visible in this example as follows. Gaining knowledge could be done via informal observation by a nurse, or via a formal standard routine assessment of the patient. Understanding the knowledge is then either done based on the formal outcome of a

standard test for all patients admitted to the ward, or on the informal interpreted meaning given to suspected problems observed by a colleague. Acting can result in either a long or short version of the test.

‘Networking’ in this example showed the professional communicating with the patient, as well as mentioning the communication with a nurse. Communication between professionals seemed mostly invisible to or without input from the patient. The physician asking the patient ten questions would be more visible, although the patient may not entirely be aware they are part of a specific test. The nurse’s communication with the doctor seemed informal, whereas the AMT test was a formal way of assessing a patient.

‘Situating the process’ could be found in, for instance, the professional being aware of the NHS guidelines. These suggested that all patients have a certain assessment done on admission. In addition, it could be found in the statement that an assessment would be done *‘depending on how they are’*. This showed an aim to tailor the process to the patient’s individual needs. This example presented how each situation may require a different assessment route, including different ways of working as the process is situated in its context.

## 4.7 Summary

The findings demonstrate how assessing older people is enacted through navigating. ‘Navigating’, therefore, was named the core category. Three themes were found within this: ‘Containing complexity’, ‘Networking’, and ‘Situating the process’.

‘Navigating’ is a complex, context dependent, social process, in which each assessment can be conducted in a different way. It encompasses extensive networking involving professionals and patients, and professionals contain complexity through using formal and informal, visible and invisible ways of working, as they prioritise aspects of care with the aim of meeting competing demands.

The theme ‘Containing complexity’ showed the three steps of assessment, which are knowing, understanding and if needed, acting. Each step within assessment can be undertaken using a range of different elements. For instance, professionals could gain knowledge about their patients through hearing, reading and/or observing. These elements were embedded in different ways of working, including diverse levels of formality and visibility. In addition, comprehensive care processes were separated and

prioritised into isolated tasks. Professionals engaged these ways of working throughout the navigating process, aiming to meet competing demands within the ward environment.

Another theme focused on the 'Networking' activities between professionals, as well as those between professionals and patients. The multi-disciplinary team included a large number of disciplines, each focusing on their specific area of expertise. Communication between these professionals happened both in writing and verbally. Communication focused on updating one another on progress made, with limited time used for multi-disciplinary discussion of patients. Nurses were found at the centre of the multi-disciplinary networking system, focusing most of their time on gathering and sharing information from and with other disciplines. The role of the patient within navigating appeared to be a passive one, as they mainly provided and received information, whilst having limited input regarding decision making in relation to their care and treatment. The data suggested patients have different preferences regarding their involvement throughout the process.

The theme 'Situating the process', showed how each navigated assessment process was tailored to its context. This context included individual patient needs, as well as practical aspects of daily ward life such as availability of professionals and the existing NHS care guidelines. For instance, the patient's cognition or the absence or presence of certain colleagues impacted on the choices made within the navigating process, resulting in tailored processes which were aimed to fit into the situation in which they took place.

## Chapter 5: Discussion

---

The aim of this study has been to explore the assessment process on a ward for older people at an NHS University Hospital in England. A constructivist Grounded Theory approach (Charmaz, 2014) enabled a focus on exploring the current assessment practice from the perspectives of both patients and professionals. In this chapter the findings are discussed and examined in relation to current evidence. Then a reflexive account of the process of study is presented and the rigour of the study is explored.

### 5.1 Discussing the conceptual framework ‘Navigating’

In this section the aim was to discuss the conceptual framework of navigating as a whole (Figure 3). Key aspects of the conceptual framework and the behaviours and relationships within it will be further explored, aiming to build up the conceptual framework, towards the core category of ‘Navigating’. At the back of this thesis the theoretical framework can be folded out, so it can be viewed next to the written text of this discussion to enhance clarity.

This study focused on understanding the current approach to assessing older people. To do this, one ward at an NHS University Hospital in the UK was included, to explore their approach. Therefore, this could be interpreted as the ‘usual care’ given on this ward. However, due to the chosen methodology, generalisability was not an aim of this study (Charmaz, 2014). Instead, readers of this study are encouraged to see if or how the findings of this study could apply to their situation or setting (See also section 5.5). At the heart of each assessment, the three steps of knowing, understanding and, if needed, acting were found. Each step could be done differently depending on the situation in which it took place, resulting in a number of different elements of assessment for each step. The three steps of assessment that were found in the data from the current study, support multi-disciplinary literature around the process of assessment (Rubenstein and Stuck, 2006; Nishinaga, 2007). However, not every definition of assessment is in line with these three steps. Within the nursing literature, the American Nursing Association presents assessment as step one of a five step nursing process, focusing assessment solely on gathering information (American Nursing Association, 2016). The interpretation of knowledge and acting upon it, are step two to four of the nursing process rather than being part of assessment. Therefore, four steps of the nursing process by the American Nursing Association are similar to the three steps presented in this thesis. The findings

from the study presented in this thesis suggest assessment is not a 'step' in the nursing process, but rather a complex navigating process which is incorporated throughout the full nursing process. However, it is not synonymous to the care delivery process, as it focuses on gaining and using knowledge about the patient. Assessment, therefore, could be seen as the skeleton or spine of the care delivery process, being at the very centre of it. In this analogy, care delivery is the full body that is set up around the process of gaining and using the knowledge about the patient. Working with knowledge about the patient links to the patterns of knowing in nursing (Carper, 1978). These can be linked to the findings in the current study as the patterns were evident in the data. The professionals' focus on providing safe and compassionate patient care demonstrated their moral compass. The existence of aesthetic knowing, where intuition and experience result in what has been called 'the art of nursing', has been found in the social process of navigating and within the use of the informal approach when assessing older people. The use of empirical knowledge was seen when professionals undertook the second step of assessment, where they understood and made sense of the knowledge they gathered about the patient. The use of scientific knowledge could be found in the use of NHS care guidelines throughout assessment practice. Although Carper (1978) focused the patterns of knowing on nursing care specifically, the study presented in this thesis showed how these patterns are also relevant to other members of the multi-disciplinary team, such as physicians and therapists.

Within the theme 'Containing complexity', a dotted arrow shows how the three steps can be repeated as needed. Such a repeated assessment includes evaluation of assessments (NMC, 2014; GMC, 2014). An evaluation goes through the same steps of knowing, understanding, and if needed, acting. For instance, nurses updating the risk assessments can be called an evaluation, and to do this, nurses went through the same three steps. The framework of 'Navigating' does not mention evaluation of an assessment specifically, but instead sees it as a repeated assessment process, going through the three steps again.

The conceptual framework of 'Navigating' presents the elements of assessment embedded within the different ways of working. These include a variety of formality and visibility levels, as well as a separating and prioritising approach. This means that each element in each step can be conducted differently. For instance, a formal risk assessment such as a skin assessment may not be visible to the patient, as professionals observe the

skin whilst the patient is made comfortable in bed. With a different patient this may be done more visibly, as a nurse might verbally ask the patient whether she can check the skin.

In the current study, the formal approach was closely linked to documentation and standardisation of the process, whereas the informal approach was explained as less structured and more adaptable. The choice for the words informal and formal, was reconsidered several times throughout the analysis process. Other words were suggested to replace the word informal, such as unstructured, ongoing, continuous, and internal. Informal assessment in this context does not mean a casual, incidental, unplanned, or even unskilled approach. It was meant to represent the ad-hoc, less structured, internal, highly skilled and continuous process. Additionally, it was meant to highlight the difference compared to formal assessments, which are based on structured communication and documentation, and are conducted at specific designated times, such as board round and during an admission of a patient.

The findings of this study provide evidence that the informal approach is important to professionals when they assess older people. The NHS guidelines and policies, however, strongly advocate a formal approach to assessment for all members of the multi-disciplinary team (NHS Professionals, 2010). The extensive use of the informal ways of working seems to be overlooked within the culture of the NHS, as professionals suggested *'if it is not written down, it has not been done'*. This statement was made by several of the included professionals from a variety of disciplines in the current study, and it was also found by Michel, et al. (2017), when they studied the content and meaning of administrative work in nursing. This view does not acknowledge the often invisible and informal approach professionals use when caring for older people, as this approach may not result in a written record. However, this does not mean it has not been done, and rather dismisses the informal ways of working which professionals seemed to explain in the current study as a natural and integral part of their work.

Penney, et al. (2016) found a similar distinction, when they studied nurses' perception of assessment skills in Australia. In their qualitative study of thirteen nurses, they also used the terms formal and informal, and added to that the concept of a silent assessment. Silent assessment was explained as:



*'The 'unspoken' assessment that participants related back to prior experience and their intuition. Nurses associated silent assessment as subconscious action and this was identified particularly when they entered a patient's room' (Penney, et al., 2016, p.318)*

This is a description of an assessment that in this study was explained as an informal observational assessment. Whereas Penney, et al. (2016) defined a third kind of assessment, in this study the 'silent assessment' has been interpreted as one way of undertaking an informal assessment. The explanation of informal assessment by Penney, et al. (2016) is also slightly different as it includes 'ticking the boxes' within the documentation. In the study presented in this thesis, all documentation was seen as a standardised and formal approach to assessment (Allen, 2015). This study extended the findings by Penney, et al. (2016), by providing data from a multi-disciplinary team perspective, as well as from a patient perspective. This provided insight into the current multi-disciplinary process of assessment in which different disciplines worked together within the care of older people, and the patients' role within this process. This resulted in a more comprehensive perspective of the current assessment process on a ward for older people than has previously been documented.

The data from the study presented in this thesis showed how professionals often combine the informal and formal approach whilst assessing their patients. The informal approach could exist independently from the formal way of working, which was seen in HCAs undertaking observational assessments. As they provided direct care to the patient they observed their patient closely, often in an informal manner. This information was often shared with a senior colleague, who would then decide on how to take this further. This colleague might then undertake a more formal assessment. The HCA however, may not have formalised his or her assessment via documentation. Although in theory the formal approach could exist independently as well, professionals seemed to explain the formal approach in combination with informal actions, such as quick glances around a bay, or hearing snippets of patient information as they walked through the corridor. Often an informal observation led to a more formal assessment approach, or the informal information was used to fill in the formal weekly risk assessment. It seemed that by combining the two styles, different demands could be met at different times. The balance of the formal versus the informal ways of working differed per professional and per situation. In some situations, for instance urgent or life-threatening moments,

professionals may rely fully on informal ways of working. However, usually afterwards, when the situation has been dealt with, at least parts of the assessment process would be formalised via documentation. Additionally, physicians and therapists try to work by focusing on one patient at the time. This seems to allow them to follow a more formal approach to assessment, in which gaining knowledge about the patient and using this knowledge are carried out in a consecutive manner for this individual patient. Nurses and HCAs, on the other hand, focus on up to twelve patients at a time, and are often interrupted during their work (Ebright, 2010). They seem to use the informal approach more extensively throughout the day to meet the patient needs as they 'come across it' in an informal manner. The formal approach is used more to provide a summary of all that happened over a several hour period, or to do specific planned activities, such as updating risk assessments every weekend and attending a board round at 10am. In summary, most professionals from all included disciplines in this study, spoke about combining the approaches to meet different demands. This supports Penney, et al. (2016), Bate, et al. (2012) and Iles (2011), all suggesting that both styles co-exist and are both used in practice.

Informal ways of working may be invisible to both colleagues of the professional who navigates the assessment, and the patient. Additionally, professionals mentioned how sometimes thoughts were of an unconscious nature, making some practice invisible even to themselves, at least up to a point. Formal practice is usually visible to professionals, but may be done out of the patient's sight, which supports findings by Tutton and Seers (2004), who noted how care professionals often work around the nurses' station desk, resulting in them being less visible for the patients. Hewitt, et al. (2015) asked patients admitted to tertiary stroke centres about their views on teamwork amongst multi-disciplinary professionals. One of the conclusions was that teamwork may be invisible to the patients. Canzan, et al. (2014), who found that nurses highly value the invisible aspects of their work, such as planning and evaluating patient care, also asked patients about their perceptions on the nursing care they received. Different to the nurses, patients focused their answers on visible care, such as gestures and attention. Invisible nursing care is difficult for patients to value, as they are likely unaware of it happening.

That activities in health care, such as teamwork, caring and decision making, can be invisible or unmeasurable, has been mentioned by, for instance, Maben (2008), Ebright

(2010), Canzan, et al. (2014), Blomberg, et al. (2015), Hewitt, et al. (2015), Lavander, Meriläinen and Turkki (2016) and Phelan and McCormack (2016).

Ebright (2010) stated:

*'It is necessary to direct attention to the invisible, cognitive work of nurses.'* (p.1)

The findings in the previous chapter provided evidence to why this is necessary, as it showed the importance of the invisible aspects of assessment practice on a ward for older people. Additionally, it extended this statement to other members of the multi-disciplinary team, such as physicians and therapists.

The findings regarding the use of an informal and often invisible approach support the literature both within and beyond health care. It linked to the use of 'tacit knowledge' (Polanyi, 1966) within practice. This refers to the internal knowledge professionals have, which often cannot be explained but is visible in what is done by the professional (Schön, 1995). Gabbay and Le May (2004) discussed, what they called 'mindlines' regarding the use of evidence in practice. Mindlines were defined as:

*'Collectively reinforced, internalised, tacit guidelines.'* (Gabbay and Le May, 2004, p.3)

The idea of mindlines within practice, suggests an informal approach in which tacit knowledge is used by professionals, opposed to what they call 'cookbook' practice based on standardisation of care (Gabbay and Le May, 2004; Wieringa and Greenhalgh, 2015). A similar idea was presented by Bate, et al. (2012) in relation to decision making in health care, suggesting an intuitive and automatic approach on the one hand and a more rational approach on the other. Within the current study presented in this thesis, a similar idea has been found where the formal assessment could be seen as the rational approach, and the informal assessment as a mindline or an intuitive approach.

What can also be linked to the findings on formal and informal ways of working are the ideas by Weick, who wrote extensively on organisational sense making (Weick, 1995). He used the example of jazz music to explain his point. A musician can play a song exactly according to the sheet music, which can be related to the formal way of working presented in the previous chapter. Sometimes the musician moves away from the sheet music and improvises (Weick, 1998), which can be related to the informal approach. A blue print of what is going to happen or needs doing is often generated during formal

moments. However, unexpected events might require the professional to move away from the blue print and adapt it, or improvise for a while, until they can return to their original or an adapted blueprint. These ideas by Weick (1995; 1998) do not only apply to health care. Patriotta and Gruber (2015) presented similar concepts as they studied the activities within a local newsroom, also mentioning an 'underlying structure' or 'blueprint', whilst during the day this was adapted due to and further filled with unexpected events.

The use of informal and formal ways of working, is linked with the levels of experience of the professional. In the study presented in this thesis, newly qualified professionals felt less able to trust their informal assessment than experienced professionals, mentioning the formal assessments as something they could rely on. This supported the findings by Penney, et al. (2016). The findings regarding the experience of the professional enhancing the use of informal assessment are also similar to Benner (2001), who compared novice professionals with expert professionals, aiming to understand the role of tacit knowledge gained through experience in decision making within health care. She argues how, what we have named the informal approach, is key to understanding the difference between novice and more expert nurses.

*'It is not possible to recapture from the experts in explicit, formal steps, the mental processes or all the elements that go into their expert recognitional capacity to make rapid patient assessments.'* (Benner, 2001, p.42)

Weick (1998) has a similar point in his essay around improvisation within sense making, when he stated:

*'To improve improvisation is to improve memory .... To improve memory is to gain retrospective access to a greater range of resources.'* (Weick, 1998, p.547)

The findings are also in line with Rycroft-Malone, et al. (2010) when they suggested protocol-led practice supports the less experienced nurse, whereas the more experienced nurse felt less positive about the use of protocols in practice. The formal assessment process could be seen as such a protocol as it follows predesigned paperwork and a certain standardised approach.

Health care has been influenced by rationalism and formalising knowledge has been emphasised in health care (Polanyi, 1967; Tanner, et al., 1993; Schön, 1995; Mantzourou

and Mastrogiannias, 2011). However, Allen's (2015) statement around standardisation in health care was supported by the findings in the current study:

*'Health care work often defies such standardisation and control'* (p.16)

Rycroft-Malone, et al. (2009) and Martin, et al. (2017) also address how standardisation should not exclude clinical judgement and autonomy. The findings suggested that the formalisation and standardisation of care seems to overlook the tacit knowledge and the informal approach professionals develop more internally. Professionals value this approach an important part of assessment practice. Recognition of the informal approach, next to the formal ways of working, as a valid and crucial skill of an assessment process on a ward for older people is vital, because professionals identified it as a key part of their navigating process.

Nonetheless, despite its importance, the informal and invisible ways of working do present with challenges. It may result in a lack of clear written evidence of the care that has been given to a patient. Written evidence can be used for legal reasons, as well as for procedural reasons. Continuity of care is complicated with many different professionals looking after the patient throughout a hospital admission. The findings in the previous chapter showed how information can be missed in verbal communication, therefore a written record can provide information to professionals when needed. The use of systematic and standardised assessment based on structured and predesigned documentation is also aimed towards reduction of missed or incomplete assessment (Harris, et al., 1998). Additionally, documentation is used when complaints have been made regarding patient care (Pilgrim, Tomasini and Vassilev, 2011; Francis, 2013), and the number of complaints is rising (Osborne, 2014). There is, however, a fine balance between enough documentation and too much. Nonetheless, if informal assessments are not documented this may result in poor communication and a hit-and-miss approach, duplication of aspects of care, missed care if actions are not carried out immediately and are subsequently forgotten, and legal consequences if complaints are taken to court. Therefore, the full breadth and depth of multi-dimensional assessment on the ward is not known exactly as not all assessment is traceable and visible (Benner, 2001). These challenges need to be addressed. To do so by expecting professionals to do formal assessment only is unrealistic, as the current study showed professionals undertake informal assessment almost constantly and it helps to meet patients' needs. Therefore, a

balance needs to be found. Firstly, professionals need to be aware of their informal practice. Secondly, they require a vocabulary to voice these ways of working (Benner, 2001; Allen, 2015). To make sure informal ways of working can be communicated, new ways may be needed to enable professionals to document and record as they go along. Communication is part of the theme 'Containing complexity', as well as the theme 'Networking'. Due to it being closely linked to the different ways of working, particularly related to the levels of formality and visibility, it will be discussed here.

The study presented in this thesis found evidence that, although formal meetings are held, and formal documentation is filled in, professionals relied more on their informal ad-hoc communication throughout the day to keep up-to-date with their patient knowledge and to know as much as possible about their patients. This differs from the findings by Bellury, et al. (2016), who found that nurses and HCAs felt the formal communication to be most important. On the other hand, it supports findings from Coiera, et al. (2002). They showed how informal communication for nurses and doctors in the emergency department accounted for almost 90% of the events. Nonetheless, multi-disciplinary literature presents team communication with a role for both formal and informal ways of doing this (Brown, et al., 2009; Sinclair, Lingard and Mohabeer., 2009). The current study showed that formal communication was more used to update others on progress made and to act as a legal record. These findings related to the importance of informal practice in day-to-day assessment of older people, challenges the prominent focus of the NHS on the formal approach (NHS Professionals, 2010), and the need for accurate and immediate documentation by professionals (CSP, 2013; GMC, 2014; NMC, 2015).

The data showed numerous statements by professionals being unhappy with the time they needed to spend on documentation. In the current study the actual time spent on this was not recorded, however the data suggested professionals felt it was overwhelming. Similar to these findings, Lavander, Meriläinen and Turkki (2016), who reviewed the literature including three original studies, claimed that nurses use 13-21% of their time documenting. Clynch and Kellett (2015) argued 25-50% of physicians' time is spent on documentation. The findings presented in the previous chapter show how nurses' documentation, although most extensive, is not often read by professionals,

including nurses and other disciplines. This is in line with the findings presented by Hripcsak, et al. (2011) and Allen (2007).

In the previous chapter professionals mentioned reasons for documentation not being read or used during day-to-day practice, including duplication, and the length of the documentation in relation to its relevance. Duplication of work can be related to the concept of waste, which could include waste of time and waste of effort. This time and effort could better be spend providing care for the patient, as currently most professionals and patients mention the lack of time in relation the care they give or receive. Michel, et al. (2017) looked into the content and meaning of administrative work of nurses, finding documentation that was integrated and relevant to clinical practice to be more positively perceived than when it was not. Clynnch and Kellett (2016) argued that further thought should be given to the current use and value of documentation, and the implications it has on the use of professionals' time, a finding that the current study supports. Documentation is time-consuming, and time spend writing is time that cannot be spend providing care to the patient. As time is pressured, it is important to make sure documentation is necessary and efficient, not only for legal purposes but also for day-to-day practice (Michel, et al., 2017).

The findings from this study showed how different ways of working are integrated in practice. Documentation is often linked to formal assessment, whereas informal ways of working have a risk of going undocumented. Some information gained from informal assessment may be used in documenting formal assessment and for daily reports. However, as professionals suggested the informal approach is ongoing, it is not to be expected that all can be documented. Given the continuous nature of informal practice, it seems counterproductive to focus efforts solely on the documentation of all informal assessment processes, as it is not possible to write constantly without severely compromising patient care. However, as discussed above, an incomplete written record of patient care may result in a number of problems for professionals and patients.

Recent and future technologies may be better suited to the informal ways of working. Professionals may be able to voice record as they go along (Conn, 2015), although it may be less helpful for day-to-day use as professionals are unlikely to have time to listen to voice recordings without being able to scan through them, which is possible with a written record. Another potential technology is photography to capture important aspects of care

in an instant which could then be filed automatically in a digital patient folder. For instance, the urine of a patient who is treated for dehydration should become lighter in colour as the patient is treated with fluids. Pictures of full catheter bags may provide a better comparison of the urine colour over a number of shifts when different nurses are on duty. The informal ways of working seem to relate to the ad-hoc and constant way people seem to express themselves on social media. This kind of approach to documenting one's every move, could be applied similarly within healthcare. For instance, professionals could all receive a small tablet where each patient has been given their own personal app. These apps can include all documentation for each patient, such as electronic drug charts, daily notes, admission paperwork, and bedside folder documents. If the patient could have a similar tablet with only their own app, whenever possible they could document in their own files regarding their fluid intake, toileting, and they could write a daily summary of how they are feeling. Such an approach to documentation based on technology used in current everyday life, seems to link better with the informal approach to assessing patients. All professionals and the patient can document in the same files, and the use of a tablet and apps can be used in an ad-hoc continuous manner as many people do in every-day life. However, the potential role of new technology requires further study due to limited evidence regarding their use and effects (Wu, et al., 2012; Nguyen, et al., 2015).

Thus far the different ways of working, in relation to formality and visibility, have been discussed. Another way of working which was found as part of professionals containing the complexity of assessing older people, was a separating and prioritising approach. Professionals prioritised their work by separating care processes into tasks and by focusing on medical issues before social and chronic issues. The use of jobs lists was found to be prominent, as each professional listed and ticked off their tasks. These findings resonated with current literature, which presents prioritising and separating care as a key aspect of providing care in resource limited environments, inevitably suggesting that certain tasks are delayed or left undone (Maben, Latter and Clark, 2007; Maben, et al., 2012; Jones, 2016). This means the professional must be able to understand which tasks ought to be done first and which tasks can wait. This requires skill and knowledge often enhanced through experience (Benner, 2001). In addition, there has been evidence regarding the difficulty of providing basic care due to the current workload professionals



have to deal, where they have to prioritise even basic activities (Aiken, et al., 2013; Ausserhofer, et al., 2014; Kitson, Muntlin Athlin and Conroy, 2014; Jones, 2016).

The focus on acute medical issues before all other care needs that was found in the data of this current study, has also been noted in the literature (Hendry and Walker, 2004; Hripcsak, et al., 2011; Papastavrou, Andreou and Efstathiou, 2014). In addition, the literature review presented in Chapter 2 noted the focus within hospital care on single medical issues, rather than comprehensive multi-dimensional care. This was pointed out as an area of care for older people in need of enhancing in order to meet the complex needs of this patient group (Kane, 2002; Baumbusch, et al., 2015; WHO, 2015).

This move towards a task-centred approach to care rather than a comprehensive person-centred approach has been noted in relation to, for instance, the introduction of untrained professionals (Savage, 1995). Separating care could be due to the hierarchy that resulted from such introductions (Savage, 1995) and specialisation amongst health care professionals. In the findings presented in the previous chapter it was noted how different professionals can disagree on which aspects of care take priority. Both nurses and physicians focused on what they felt were urgent tasks to manage their workload. This finding supported Tang, et al. (2013), who was also able to link this to nurses sometimes not fully understanding the reason for certain medical treatments which were prioritised by physicians, and were thus focusing on other tasks instead. Janns, et al. (2012) used a practical example to explain conflict within multi-disciplinary teams, linking different priorities to differences in background, roles and power positions. The different roles within the multidisciplinary team in relation to navigating assessment practice has been discussed further later on in this discussion.

The findings also suggested that a conversation with a patient, as well as more specific emotional support was often one of the first things to be omitted if competing demands resulted in a heavy workload. Patients and professionals mentioned the lack of time to have a chat or discuss feelings in-depth during the admission. This may suggest a limited focus on psychological care, which is in line with the literature on this topic (Allen, 2007; Aiken, et al., 2013; Jones, Hamilton and Murray, 2015; Tobiano, et al., 2015). Liaschenko and Fisher (1999) suggested dividing patient knowledge in three different types. Case knowledge includes awareness of pathology and treatment protocols, patient knowledge focuses on the knowledge professionals need about a patient to move the admission

along, and person knowledge focuses on getting to know the patient on an individual level that links to person-centred care (Liaschenko and Fisher, 1999). The findings of this thesis showed that the main focus of professionals is on case knowledge and patient knowledge, whereas person knowledge was less of a key aspect whilst navigating the assessment of older people. This resonated with Allen (2015):

*“Knowing’ the patient is less about emotionally intimate relationship-building and more about keeping abreast of (...) an individual’s trajectory of care.” (p.44)*

The findings from the study presented in this thesis also suggested patients have little input to priority setting as navigating the assessment process is a professionally led process, supporting findings of Allen (2007), Maben, et al. (2012), and Jones, Hamilton and Murray (2015). Therefore, the role of the patient within the theme ‘Containing complexity’ is a passive one, and focuses on providing and receiving information.

The conceptual framework shows a number of balloons to depict professionals and patients in the networking process. Balloons are different in size and colour, to represent their prominence and role within the network. The most obvious is the small colourless balloon of the patient at the edge of the networking process, which is a key finding of this study. Some patients wished they had more input, others wished they were updated more often, and some were happy with how things were. It was nonetheless clear that all patients appreciated being at least informed about what was going on during their admission. These findings challenge the suggestions in several international and national guidelines and frameworks on patients being active participants within health care, based on the principles of PCC and SDM (McCormack, et al., 2010; Ekman, et al., 2011; NHS England South, 2014; Oliver, Foot and Humphries, 2014; WHO, 2015; Wijma, et al., 2017). These ideals of care have been discussed in Chapter 2, and advocate that the patient should be at the centre of all care, including the assessment process. All professional bodies (CSP, 2011; GMC, 2014; NMC, 2015) mention the importance of PCC as a core professional value, and they state that the patient should be fully informed and part of the decision making process regarding their own care and treatment. This means that the findings from the present study show that the principles of PCC and SDM were not fully reflected in the way older people were assessed.

In the conceptual framework the patient is positioned on the edge to strengthen the representation of patients mainly being updated by professionals rather than them being

involved, which would have resulted in a more central position in the framework. This supported findings by Land, Patty and Seymour (2016), who reviewed 28 studies regarding shared decision making, finding how in most situations professionals from the multi-disciplinary team suggest one option to the patient, rather than providing multiple options for further discussion. Soleimani and Seyedfatemi (2010) suggested four types of patient participation. In their Grounded Theory they found adhering, involving, sharing and true participating as types of participation from minimal input from the patient to an equal relationship between the patient and professionals. The most intense types of participation found by Soleimani and Seyedfatemi (2010) were not represented in the data of the current study. The findings in the previous chapter showed how patients often receive information, but are not necessarily involved in discussion of optional treatments.

Although the patient positioned at the edge of the networking process, and given the general health care regulations' focus on PCC and SDM, not all patients experienced their passive position as a negative one. The findings showed different patient preferences regarding involvement in decision making, which supports findings by Levinson, et al. (2005) and Tobiano, et al. (2015). Some patients were happy with professionals making the decisions, as they felt they were better placed to do so. However, other patients did experience their passive role negatively and they would have preferred more involvement in decision making. Involving older people in the networking process is challenging. A patient's cognition, amongst other challenges, have been documented in the literature to influence patient involvement in decision making (Finucane, et al., 2002; Mata, Schooler and Rieskamp, 2007; Peters, et al., 2007; Joseph-Williams, Elwyn and Edwards, 2013). These other challenges included physical barriers such as difficulty hearing (Bastiaens, et al., 2007), patient's health status, the attitude and skills of professionals, and the attitude of patients and their relatives (Soleimani and Seyedfatemi, 2010; Tobiano, et al 2015; Chiu, et al., 2016). Involving older people within the process of decision making regarding their care and treatment requires willing patients, willing and skilled professionals, and allocated time in which information can be shared and processed relative to the individual needs, to make well-informed and well-considered care and treatment decisions (Eldh, Ekmand and Ehnfors, 2006; Bastiaens, et al., 2007; Berland and Severinsson, 2016). The findings in the previous chapter showed time was under pressure and professionals had to prioritise their tasks. This often meant that communication with the patient was perceived as a lesser priority than medical care, such as electrocardiograms. It seems

appropriate to make sure the degree of involvement desired by the patient, is discussed between professionals and patients and their relatives as soon as possible during the admission and this should be reviewed as appropriate (Tobiano, et al., 2015). The current study did not find any evidence during document reviews that patient involvement was formally assessed, and other data collection did not provide other insights.

In the data professionals spoke in a positive way about including patients. However, patients did not always feel included, and observation data showed how decisions were often made without the patient present. Therefore, attitudes were not always found to be consistent with actual practice. This supported findings by Pollard, Bansback and Bryan (2015) from their systematic review, where physicians were found to have positive views on shared decision making within practice. Despite these views, shared decision making was not always used due to lack of support and concerns around patients' ability to take responsibility. Professionals did emphasise the influence of individual patient needs on how they would navigate an assessment. This can be found in the theme 'Situating the process', in which the individual patient needs influence the processes of networking and containing complexity. For instance, the patient's cognition or whether they were for treatment or for end of life care would influence the way an assessment would be undertaken. A navigated assessment is therefore a personally tailored process, to provide individualised care to each patient. Their needs can be complex due to a combination of problems (Abellan van Kan, et al., 2010; Hosseinpour, et al., 2012; Van Oostrom, et al., 2012; WHO, 2016b), potentially resulting in a unique set of combined needs.

Tailoring care to meet individual patient needs links in with the basic principles of person-centred care (PCC), in which individual patient's needs and shared decision making are at the centre of all multi-disciplinary care (McCormack et al., 2010; Ekman, et al., 2011; Wijma, et al., 2017). This approach to care was elaborated on in the literature review presented in Chapter 2. Despite professionals tailoring their navigation to the individual patient, the data from the study presented in this thesis did not find evidence that all the concepts of PCC are currently a key part of daily practice on the ward for older people. The relatively passive patient role and the separated and prioritised approach to care are not in line with the fundamental characteristics of PCC, and therefore it is not yet fully integrated into assessment practice. This supports findings by McCormack, et al. (2010)

and Ekman, et al. (2011), who also mentioned limited use of person-centred care in clinical practice.

The study presented in this thesis, included a number of professionals, such as nurses, doctors, therapists, and care assistants, and data showed how each professional played their own role within the overall process. The complexity of the care of older people is widely understood to require a multi-disciplinary approach to meet the complex patient needs (Hickman, et al., 2015; WHO, 2015). The findings showed how dimensions of care seemed to be divided amongst different disciplines. Communication focused on updating and informing other professionals, leaving little room for discussion between disciplines about patient care. These findings differ from the interdisciplinary approach suggested by Wieland and Hirth (2003), and they do not necessarily result in an integrated approach to care (Sorrells-Jones, 1997). At the same time, the findings supported documented evidence on a fragmented approach to the care of older people who are admitted to hospital (Cornwell, et al., 2012; Kitson, Muntlin Athlin and Conroy, 2014; Oliver, Foot and Humphries, 2014; Kessler, Heron and Dopson, 2015; Lancaster, et al., 2015; WHO, 2015). In multi-disciplinary literature the fragmented knowledge held by professionals in a multi-disciplinary team has been documented (Oborn and Dawson, 2010), and Sheehan, Robertson and Ormand (2007) commented on the lack of discussion of patients within the team and a focus on updating one another of discipline specific progress. They called this '*working in parallel*'. Ten years after this study was published, the current findings represent a similar approach to teamwork, remaining at a multi-disciplinary, rather than an interdisciplinary level (See also page 34).

This fragmented approach to care might be due to the way the health care system has developed within the NHS over the years (Cornwell, et al., 2012; Tutton and Langstaff, 2015). This can, for instance, be seen in the way tasks previously done by certain professions, have moved to other professionals (Savage, 1995; Allen, 1997). HCAs and therapy assistants have been introduced to assist trained professionals. This has resulted in a large multi-disciplinary group with many specialists and hierarchical layers within disciplines. For a number of patients participating in the study presented in this thesis, this resulted in not being fully aware who did what within their team of care professionals. Patients mentioned the fragmented approach and wished for more collaboration

between professionals. These findings are similar to those by Hewitt, et al. (2015) when studying multi-disciplinary teamwork on a stroke unit.

Although hierarchical structures within each discipline may result in some fragmentation of care, our findings suggested that especially less experienced professionals felt supported and safe if they knew a senior member of staff was available to give advice when needed. This supports the findings from Watterson, Currie and Seers (2015) who found that an important aspect of ward sisters' work was supporting junior nurses. Specialisation can result in excellent and highly-skilled practice, but it also has the potential of de-skilling those who are closest to the patient (Ebright, 2010), resulting in a task centred approach in which isolated tasks are prioritised. To provide continuity of care and to enhance informal and invisible assessment practice, it seems crucial to make sure those professionals nearest to the patient are highly skilled and sufficiently trained (Benner, 2001; Ebright, 2010; Aiken, et al., 2014).

To change a more task focused and divided approach into a more comprehensive and integrated team approach, in which all processes are dealt with in an integrated manner, a simple solution does not exist. Cornwell, et al. (2012) suggested that this approach is linked to the design of the health care system, and changing it requires an in-depth rearrangement of the system at its core which might be costly. Similar to the findings presented in this thesis, Tutton and Langstaff (2015) described how the current system seems to have moved away from a model which is called Primary Nursing, back to a task-centred approach. In Primary Nursing the relationship between patient and professional is at the centre of care. Primary Nursing has been summarised by Manthey (1980) using two main points:

*'1) to allocate twenty-four-hour responsibility for each patient's care to one individual nurse, and 2) to assign this nurse the actual provision of her patient's physical care whenever possible.'* (p.xv)

However, a recent systematic review (Mattila, et al., 2014) suggested there is only limited evidence around the effects of this approach to care.

Overall, a prioritised and separated approach could be due to contextual aspects, which can be found in the theme of 'Situating the process' in the conceptual framework. The findings presented in this thesis, showed how resources are limited and this has an impact

on navigating assessment processes. HCAs and assistant therapists take over activities that used to be undertaken by registered and qualified professionals. A high pressure on hospital beds was mentioned as a concern in relation to rushed discharges of patients admitted to the ward, attempting to empty beds for new patients. Professionals also mentioned how they sometimes struggled for time, as they had to prioritise their activities to manage a high workload. These findings reflect the current state of the NHS in the UK documented in the literature. The King's Fund presented evidence of rising Accident & Emergency admissions, as well as delays in discharging patients and funding reduction (Maguire, Dunn and McKenna, 2016). The term 'bed blockers' has been used to describe patients who are difficult to move through the system, often resulting in prolonged stays on medical hospital wards, despite the patient being ready for discharge (Challis, et al., 2014). With families less able to care for older relatives on a daily basis, and a growing population of older people (WHO, 2016b), the need for professional care is rising. The data from the study presented in this thesis showed that this means professionals may be under pressure to move patients through as quickly as possible, as well as managing a high workload on a day-to-day basis. Professionals are often working at their limits, as they try to prioritise all care constantly to meet competing demands (RCN, 2013; British Medical Association, 2017). The current pressures are cause for concern as they influence the way care is provided, resulting in a separated approach to care. Multi-disciplinary teamwork that was explored during this study showed how the different roles and positions of professionals required respect and trust, each member wanting to feel valued. The findings of this study show how professionals aimed to respect one another's input, and some mentioned feeling free to challenge others when they felt this was needed in relation to patient care and safety. This supported findings by Sims, Hewitt and Harris (2015a) who reviewed the literature and found that collaboration within a team was enhanced by knowing each other's roles and respecting one another. Tang, et al. (2013), Janns, et al. (2012) and Bookey-Bassett, et al. (2017) also presented links between multi-disciplinary teamwork and respect and trust, unequal power, and understanding each other's roles.

As was mentioned in the literature review in Chapter 2, inter-professional teamwork has been presented in a framework including thirteen mechanisms to understand the processes involved (Harris, et al., 2013; Hewitt, Sims and Harris, 2014; 2015; Sims, Hewitt and Harris, 2015a; 2015b). Examples of these mechanisms are '*Shared sense of purpose*',

*'Collaboration and coordination', 'Support and value', and 'Team behavioural norms'* (Harris, et al., 2013, p.31-32). When comparing this framework with the findings of the study presented in this thesis, several mechanisms could be related to the data. For instance, *'Support and value'* was found in professionals mentioning they wanted to feel like a valued and respected member of the team. *'Efficient, open and equitable communication'* was found in professionals mentioning being able to challenge one another. *'Team behavioural norms'* can be linked to the ways of working used within the team, which have been discussed earlier in this discussion. The data from this current study showed duplication continues to be a part of everyday practice and continuity of care is lacking, which represents aspects of *'Collaboration and coordination'*. Not every mechanism was visible in the data from this study, for instance *'Individual learning'*, and *'Generating and implementing new ideas'*. However, these may be less linked to the topic of assessment practice and may therefore be less visible in this study.

With so many professionals involved in patient care and each discipline focusing on certain aspects of care, these efforts need to be pulled together at least and be fully integrated and coordinated at best. The data from this study suggested nurses focus on gathering and sharing information from and with other professionals within the multi-disciplinary team. This was especially visible in nurses' awareness of what other disciplines were doing, and their focus on being up-to-date with treatment plans made by others. As their time was used as such, there was limited time allocated towards providing hands-on care, such as assisting with washing and toileting, which was often delegated to HCAs. Several nurses noted they would appreciate a more active role within the delivery of direct patient care, but they felt their networking activities took most of their time. In addition, the data showed that nurses use predesigned, standard, and printed care plans. These required a date and a signature on the date of admission and were not further individualised per patient.

To discuss the role of nurses the definition of nursing is relevant. Henderson defined nursing as follows:

*'The unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge. And to do this*



*in such a way as to help him gain independence as rapidly as possible.*' (Henderson, 1991, p.21)

In more recent years nursing has been redefined (RCN, 2014), and the findings grounded in this thesis' data reflected this more recent definition of nursing. The current definition is lengthy and is written around six characteristics which all seem to be based mainly on communication and networking. Words such as 'empower', 'promote', and 'prevent' are used, and the result is a less practical definition than the one given by Henderson. Direct patient care, which is the basis for Henderson's definition of nursing, is mentioned in the explanation of the RCN's definition, but it has no longer the key central position.

With the data showing how registered nurses have moved away from direct patient care, focusing their work on networking at the centre of the multi-disciplinary team, HCAs who have received limited training, were found to provide most direct care to patients. This supported the findings by Williams, Harris and Turner-Stokes (2009), who investigated how time was spent by registered nurses and HCAs in rehabilitation. Overall, 46% of all activities monitored were part of direct patient care, showing that more than half of the activities was spent undertaking indirect patient care (Williams, Harris and Turner-Stokes, 2009).

Earlier it was noted that the informal approach was more trusted by experienced professionals, as well as that HCAs often rely on the informal approach during their practice. From the definition of nursing (RCN, 2014) the following statement was made regarding the difference between registered nurses and unregistered nursing staff related to assessment practice. Registered nurses are supposed to have:

*'The knowledge that is the basis of the assessment of need and the determination of action to meet the need.'* (RCN, 2014, p.4)

Hence, this creates a discrepancy between trained nurses being the ones who are seen as most skilled at assessment, whereas the data from this study showed how HCAs play an important role in initial informal assessment due to their position within direct patient care. In this study HCAs were often described as the ones closest to the patient, able to observe them closely and to inform senior colleagues of any changes or worries. This supports Bellury, et al. (2016), and Lavander, Meriläinen and Turkki (2016) who also noted the role of HCAs in direct and close patient care. Kessler, Heron and Dopson (2015) argued

HCA's are "an extra pair of eyes" for nurses. Given the findings on the importance of informal assessment practice, which is steeped in experience and tacit knowledge, the current way of dividing care between HCA's and nurses may potentially result in less advanced assessment practice, with HCA's perform most of the initial informal assessment of the patient. Ebright (2010) stated in relation to this:

*'When non-professional nursing staff are the primary care givers at the bedside, rather than the RNs [Registered Nurses], the RNs do not have the opportunity to make as many important observations and critical decisions necessary for safe care.'* (Ebright, 2010)

Aiken, et al. (2013; 2014; 2016) conducted research in a number of European countries including England. In their most recent publication they claim that replacing a nurse assistant with a nurse for every 25 patients showed a decrease of 18% in the odds of patient mortality (Aiken, et al., 2016). In agreement with Aiken, et al. (2014) and Ebright (2010), the findings in this study presented concerns around nurses providing less 'hands-on' care to the patient, especially in relation to the execution and development of informal ways of working.

A current development in nursing that is related to this discussion around HCA's and trained nurses, is the role of the associate nurse. The ward included in this study did not have associate nurses. However, the development links to the point that is discussed here and will therefore be addressed. This role positions itself in between HCA's and registered nurses, with associate nurses receiving on-the-job training. It is, however, a developing role and currently it is not clear whether in practice this means there will be less registered nurses, or whether the associate nurses will replace or be added to the team of HCA's. The Health Minister stated:

*'Once trained they will work alongside healthcare support workers to deliver hands-on care, freeing up time for existing nurses so they can use their specialist training to focus on clinical duties and take more of a lead in decisions around patient care.'* (Department of Health, 2015a)

If this is indeed the eventual result of the introduction of this new role, the concerns stated above in relation to informal assessment practice and nurses moving away from the patient, remain the same. To move the expertise of the registered nurse further away from the patient, replacing them with less qualified professionals, will affect practice. The

findings from this study point specifically towards the highly skilled informal assessment practice, and its crucial role within navigating an assessment, requiring registered nurses to spend time with their patients. In addition, HCAs require adequate training and supervision to support them in their assessment activities. Training for HCAs was found to be most effective when it included tailored training sessions to the individual needs and a well-planned training process (Williams, et al., 2016).

From here the focus of the discussion will move back to the role of nurses at the centre of networking. In the conceptual framework, the nurse is represented at the centre of the network in a bold and relatively large balloon. This represents their key position in the networking process of a navigated assessment. In a cross-sectional study Shoham, et al. (2016) concluded that physicians and therapists are more central to inter-disciplinary communication than nurses. They found nurses often communicated with other nurses, rather than with other disciplines. This is not supported by the current study which found nurses taking a central role within the multi-disciplinary team, similar to findings by Allen (2007; 2015), Propp, et al. (2010), and Ehrlich, Kendall and St John (2013). This is partly out of necessity as 'someone has to do it' and partly as nurses seem suitable for this role (Allen, 2015). Although nurses felt they were at the centre of the networking system, other professionals did not always seem to realise or acknowledge this, suggesting the invisibility of the nurses' efforts. This supports Allen (2015) who noted the invisibility of nurses undertaking organisation aspects of care.

Nurses being at the centre of the network was found to be not exactly the same as coordinating the multi-disciplinary team. This supported findings by Allen (2015) who also identified how nurses seemed to face difficulty coordinating care whilst lacking formal authority within the ward environment. In the data from the study presented in this thesis, nurses focus on getting information from others, which they described as '*chasing*'. Both in multi-disciplinary and nursing specific literature, the role of the nurse within the multi-disciplinary team has been linked to a potentially lower status than, for instance, physicians and senior therapists (Osborn and Dawson, 2010; Janns, et al., 2012; Allen, 2015; Liberati, Gorli and Scaratti, 2016). This lower status may be due to the hierarchy of knowledge within healthcare, where medical knowledge is linked to power. In addition, historically nursing was a female profession with nurses being perceived as a support to physicians (Allen, 1997; Maben and Griffiths, 2008; Goodman, 2015). Ehrlich, Kendall and

St John (2013) suggested that nurses need more support, a broad range of skills and resources to be able to fully develop as coordinators of care.

In summary, the role of the nurse is complex and seems to cover a wide variety of activities (RCN, 2014). Hart (2015) found that being '*a jack of all trades*' may give an impression of having no unique contribution. However, nurses do provide a centre to the networking system within the navigation of assessment. The nurses' contribution to assessment currently includes undertaking both formal and informal assessment throughout their shift, as well as sharing information at the centre of the network. However, as explained above, the initial informal assessments are often undertaken by HCAs as they are closer to the patient at a more regular basis. The nurses in the current thesis experienced their role at the centre of the network as overwhelming, and most of them mentioned they would rather spend more time with their patient. Allen (2015) highlighted the key role nurses have regarding planning and organising care, and advocates for nurses to embrace this kind of role, accepting their position related to direct patient care has changed towards more organisational input (Allen, 2015). However, studies such as by Aiken, et al. (2016) cannot be ignored as they present lower mortality rates when nurses look after patients rather than untrained nursing staff. In addition, the findings of this thesis present a crucial role for the nurse within the navigation of assessment which includes an informal approach for which close contact with the patient is beneficial. This informal approach was explained earlier as an expert nursing activity which requires extended skills, for which HCAs have not received the appropriate training. Taking all this into account the role of the nurse seems to need a balance between allocated time for direct and hands-on patient care, and time to continue and develop their role at the centre of networking on a ward for older people.

Pulling the three themes together results in a navigating assessment process, which is led by a professional. Navigating is not an uncommon term within health care literature. Usually it links to nurses signposting patients through the process of their treatment, for instance after they have been diagnosed with cancer (Cantril and Haylock, 2013; Wang, et al., 2015; McMurray and Cooper, 2016), or professionals navigating the practical day-to-day activities on a hospital ward (Cathro, 2016). In these studies, assessment is seen as the first step in the navigation process (McMurray and Cooper, 2016). However,

navigating in this study is different as it presents as the central process of assessment, which is a new finding.

The data suggested navigating can be seen as a social process. Social processes have been highlighted by Charmaz (2008; 2014) as a key focus within constructivist Grounded Theory and point to the importance of interaction. This can take place in four forms including intrapersonal, person to person, person to group, and group to group (Bardis, 1978). Throughout the navigation of an assessment, interaction at all these levels was crucial. This is made specifically clear within the theme of 'Networking' in which interaction involving patients and professionals was presented as a crucial and constant aspect of navigating. This theme will be further discussed at a later stage in this chapter. The central role of networking, however, supported navigating as a social process.

Navigating enabled assessments to be dynamic and different to one another, as professionals aimed to fit each process to its context. The need for flexibility throughout the process of assessing older people within the context of acute care settings, as represented in the core category of 'Navigating', supported Nolan and Caldock (1996). They addressed how, at that time, the need for standardisation of assessment practice became stronger and resulted in predesigned documentation. The authors, however, suggest that a framework around assessment needs to be flexible, so it may be adapted to the circumstances in which the assessment takes place. Literature including a variety of professional disciplines also mentioned the importance of combining standardisation of care with clinical judgement and autonomy and contextual aspects (Schilte, et al., 2000; Rycroft-Malone, et al., 2009; Martin, et al., 2017). The study presented in this thesis provided evidence towards these suggestions. It also provides a conceptual framework regarding assessing older people in which day-to-day reality includes flexibility and adaptation:

*'To prevent things from going wrong, practitioners anticipate, react, accommodate, adapt, and cope to manage complexity in the midst of a changing environment.'* (Ebright, 2003, p.631)

Within the navigating concept of assessing older people, professionals can conduct assessment in different ways, including different elements of assessment, different approaches to assessment and to networking. This all depends on the context in which it takes place. This means that the three themes link and overlap within the concept of

‘Navigating’. ‘Containing complexity’ links to both ‘Networking’ and ‘Situating the process’ in the following way. Networking adds to the need for containing the complexity, as well as supports the process of containing complexity. The number of professionals involved, complicates networking within the assessment process. At the same time, networking is a way to manage complexity and pull different aspects together. Additionally, the context in which an assessment takes place, has an impact on ‘Containing complexity’ and ‘Networking’ and it is therefore positioned as an outside border around the other two themes. This represents how each assessment process, in which professionals contain complexity and network, is situated within its own context. This context influences the navigated assessment, and may result in assessments being carried out in different ways at different times. Therefore, each navigated assessment cannot be seen separately from the situation in which it takes place. The relevance of context in relation to the assessment practice, as grounded in the data, fits well with the constructivist paradigm that underpins this study (Charmaz, 2014). Within constructivism context is seen as something that is moving and continuously constructed, and the subject under study cannot be seen independently from it (Weber, 1904; Darmstadter, 2016). This has been elaborated on in the methodology chapter of this thesis. Therefore, the relevance of the theme ‘Situating the process’, which highlights the importance of each assessment being tailored to its context, links in well with this philosophy.

The conceptual framework of ‘Navigating’ and its three themes seem to be developed more from the professionals’ views on assessment, than the patients’ view. The theme ‘Containing complexity’ presents an active role for professionals. The role of the patient is limited to providing knowledge to the professional, or received information from the professionals within the three steps of assessment. In the conceptual framework, many different people were involved in the networking system within a navigated assessment. The nurses’ role differed from other professionals, as much of their time is spend receiving and sharing information about the patient within the team. The patient was found at the edge of networking. Their role is passive, focusing on giving information when asked by professionals, or receiving information when this is offered by professionals. ‘Networking’ is linked with a number of arrows to ‘Containing complexity’, to show that professionals undertake this aspect of navigating an assessment. ‘Networking’, therefore, is a professionally led activity, similar to ‘Containing complexity’. In the theme of ‘Situating the process’, both daily ward life and individual patient needs focus on how a professional

undertakes the assessment, with the patient as a passive receiver of it. This may give the impression that the conceptual framework has been developed from a professional's point of view. However, patient data presented a picture of patient's experiences of feeling 'out of touch' with the assessment process, and they seemed to explain it as a process in which professionals seemed to take over. Additionally, they explained how they experienced the process as a confusing one, due to many professionals being involved and receiving conflicting information at times. Therefore, the emphasis on the professionals' key role in the core category and the themes, and the less highlighted patient role, is a representation of the current assessment process as it was found in the data where professionals are active undertakers of assessment and patients are in a more passive role.

In Chapter 2 the literature regarding care for older people presented three key cultural aspects of high quality care, including PCC, SDM, and integrated teamwork. When relating the conceptual framework 'Navigating' to these aspects of care, there appears to be room for development. Although individual patient needs influenced the way an assessment was navigated by a professional, most aspects of PCC and SDM (McCormack, et al., 2010; Ekman, et al., 2011) were not fully incorporated in practice. Additionally, although a multi-disciplinary approach was undertaken on the ward, the approach is not yet an integrated one. Instead, each discipline seemed to focus on their own specific area of care, resulting in a separated approach rather than a combined focus on comprehensive care processes. Leadership within the team, where all team efforts are pulled together through a coordination effort, was not really found in the data. Nurses were at the centre of networking, sharing and receiving information from all member of the team. However, their efforts focused on chasing others, rather than on coordinating the team effort. In summary, PCC, SDM and teamwork within the navigating process could be enhanced and further developed into the process. By incorporating more principles of these aspects of care to the assessment process on a ward for older people, the position of the patient may move more towards the middle of the conceptual framework of 'Navigating'. Additionally, teamwork could develop towards a more integrated approach, where professionals not only work side by side, but rather work closely together in a coordinated effort.

When looking at the key literature on assessment practice in the care of older people most authors focus on the structured and standardised Comprehensive Geriatric Assessment (CGA). This is the perceived 'gold standard' regarding assessing older people (Ellis, et al., 2011). As mentioned in the literature review, CGA was defined as:

*'A multidimensional interdisciplinary diagnostic process focused on determining a frail older person's medical, psychological, and functional capability in order to develop a coordinated and integrated plan for treatment and long-term follow-up.'* (Wieland and Hirth, 2003)

The definition of CGA suggests a linear and standardised process where information is gained, and care is planned and provided in a structured manner. The findings as presented in the previous chapter presented a different understanding of assessment and identified a complex process of navigating, which was professionally led. Gladman, et al. (2016) stated:

*'The fact that CGA is not universally delivered within such contexts can be described as a failure to implement research knowledge.'* (p.195)

This seems to overlook that the standardised approach of a CGA may not be a perfect fit for current daily practice. Literature points to the importance of standardisation, but not at the expense of clinical autonomy, clinical judgement and contextual influences (Schilte, et al., 2000; Rycroft-Malone, et al., 2009; Martin, et al., 2017). Grounded in the data of the current study, the lack of use of CGAs might be related to these tools not dovetailing with all aspects of complex assessment practice on a ward for older people. Therefore, the lack of CGAs on wards for older people cannot solely be explained as a failure to implement research into practice. The study presented in this thesis has shown a discrepancy between day-to-day reality of assessment practice, which is a navigating process where assessment can differ per situation, and the design of CGA tools, which are focused on standardising assessment practice. This points to a limitation of CGAs, as they do not fully incorporate all aspects of current daily practice and the crucial role of navigating, including different ways of working, complex networking and contextual influences, is absent.

## 5.2 What this study adds to the literature

The following four points summarise the key findings of this study.



1. Navigating is the central social process of assessing older people, which included strategies to contain complexity, constant networking, and the need to situate each process within its context. This means each assessment process may be done differently.
2. Strategies to contain the complexity of navigating an assessment included a variety of elements and different ways of working in relation to levels of formality, levels of visibility, as well as a separating and prioritising approach to care.
3. Registered nurses were central to networking, as they focussed on gathering and sharing information from and with the multi-disciplinary team.
4. Patients had a passive role within the assessment processes on this ward for older people, and they expressed different preferences regarding their level of involvement in decision making.

In this chapter, these key findings have been reviewed in relation to the current knowledge to explore how they contributed to it, either by being new, through challenging current beliefs, or by adding evidence or knowledge.

With most of the literature on assessing older people focusing on CGAs, this study aimed to concentrate on exploring the assessment process in practice. The study's findings showed navigating as the key social process of assessment, which included different ways of working, contextual influences, and complex networking. Navigating presented a different approach to assessment than the 'gold standard' presented in current guidelines. Through navigating, assessment processes can be conducted differently each time, which differs from the aim of standardisation of care found in CGAs. The findings presented both formal and informal, as well as visible and invisible ways of working within an assessment process, providing new insights and evidence on how these ways of working are valued and how professionals used them in combination throughout the process of assessing older people in hospital. Therefore, these findings are an original and new contribution to the current knowledge on this subject and challenge current ideals.

The current study's findings regarding the role of the nurse, provided additional and supporting data to the existing knowledge about nurses focusing mainly on organisational work within health care practice (Allen, 2015). The current study, however, focused specifically on assessing older people and found how navigating assessment through incorporating different ways of working with different levels of formality and visibility, are

crucial aspects of assessment practice. These findings grounded in the data provided new insights on the importance of nurses being involved in hands-on direct patient care, and they challenged the suggestions made by Allen (2015), who advocates for nurses to embrace their organisational role and accept their move away from the patient. Instead, the findings from the current study provided an argument for nurses to focus not only on gathering and sharing information, although this was found to be a crucial aspect of nurses' work, but to also be involved in direct patient care, as this would allow for the different ways of working within assessment practice to be undertaken by those most qualified to do so.

The findings regarding the role of the patient resonated with current literature (Soleimani and Seyedfatemi, 2010; Tobiano, et al., 2015). The findings from the current study add further evidence towards the perceived gap between national guidelines by the NHS, which suggest active patient involvement (NHS England South, 2014), and daily practice where patients seem to have a more passive role. Therefore, these findings provided up-to-date evidence regarding this topic, contributing to the discussion on patient involvement and challenges an ideal picture presented in nationwide guidelines.

### 5.3 Reflecting on the research process

As within a constructivist philosophy the research findings cannot be seen separately from the views and perceptions of the researcher (Charmaz, 2014), this section is used to present my position and views. By sharing the views I held before and during the process of this study, the findings may be placed in a richer background. From the start of developing the study and through the data collection and analysis period I wrote reflective notes about my views on assessing older people in hospital, as well as reflections on my development as a researcher. This section will include reflections on personal development and the development and process of the study presented in this thesis.

#### 5.3.1 Personal development

I have been working as a qualified and registered nurse since 2008, first in the Netherlands and then in England. I have worked in a variety of care settings for older people, including hospitals, community, and a nursing home. Assessment was a key part of the care process in all these settings, although in each setting the assessment process was carried out in slightly different ways. I have worked with CGA based assessments, as well as with less structured approaches to assessment. At the start of this PhD project I felt strongly that

CGAs are the most successful way of assessing older people, mostly based on my experience in the Netherlands where I worked during the first years after qualifying. At the start of designing this study in 2012 I wrote in a reflection:

*'A well-used comprehensive assessment that leads to a nursing plan was found useful by myself and most colleagues. It enabled us to understand the patient we were visiting and gave information on what to do and why to do it.'* (Reflection 18-12-12)

However, over the years my perspective changed due to reading literature, work experience, data collection, and extensive thought about the assessment process. A black-and-white view where CGAs were perceived as the 'best option' and 'best practice', became more nuanced, as with time and experience, both clinically and academically, my view changed towards seeing the assessment process as being both structured and unstructured, visible and invisible, formal and informal. The value of experience and internal, tacit knowledge also became more apparent.

*'Assessment seems to be everywhere ... admission, risk assessments, and then a more general and broad continuous assessment. The first ones are very related to paperwork. ... The third assessment is ongoing and seems to happen in one's head'.* (Reflection 21-4-15)

This may also be due to gaining more experience as a nurse over the years, and experience has grown continuously. As a newly qualified nurse I may have 'leant' on the formal and structured assessment processes, whereas over time experience has developed a less formal approach. At times these changes in views and beliefs were unsettling, and seemed to raise more questions than they answered:

*'I am still not entirely sure where I am going with all this, but I am sure at some point it will become clear.'* (Reflection 14-5-15)

As beliefs around assessment changed, I also changed personally. The development has been ongoing and several reflections focus on the ongoing internal difficulty between the differences in nurses' characteristics and researchers' characteristics. Especially since I continued my work at a hospital ward for older people, which was in a different geographical area than the ward where data were collected, continuing to be both a nurse and a researcher.

*'I have been trained to hear the problem and then to sort it out. ... As a nurse this is a strength, as an analyst it is a weakness. I want to sort it out, sooner rather than later. ... I look at analysis as if I have to sort the problem rather than just make sense of it.'* (Reflection 10-5-16)

In addition, at times it became visible there was an adjustment period to getting used to a different role while being on a hospital ward:

*'She obviously sees me as a researcher, but it is also strange to be seen as a researcher on a nursing ward while being so used to being the nurse.'* (Reflection 24-3-15)

The combination of being a nurse and a researcher seemed to be both an advantage and a challenge:

*'The dynamics on a ward are easy to figure out after having worked on so many different wards during my nursing career. ... This sometimes helps me as ... I understand the process which sometimes is based on unwritten rules and invisible activities and communications. ... At the same time, it is important for me to not assume that the nurse or patient I am with must have the same ideas as I have and I should ask them about what they do or say, even if it feels as though I am asking for an answer I already know.'* (Reflection 17-8-15)

Data collection was challenging and regular supervision sessions were used to evaluate the process. One piece of advice I received after I just started collecting data was crucial to me and I repeated it many times in my head whilst being in the field.

*'Focus on getting experience from participants, not knowledge.'* (Reflection 14-5-15)

This comment by my supervisors made me realise my data collection approach up until that point at times included a way of questioning which could be seen as testing the participants' knowledge on assessment practice. The advice pointed me towards their experiences, and my renewed focus seemed to allow both novice and experienced professionals to speak more freely and openly, and I was able to focus on their views and perceptions rather than judging their knowledge and practice.

Initially I felt the research process was an active process rather than something that focuses on letting 'it' emerge (Glaser, 2002). However, during the analysis process I learnt to see how these approaches are woven together, with times of active engagement with the data and times in which a sudden thought or a 'lightbulb moment' provided useful

insight into the data. Although I continue to believe these moments are due to extensive thought and study, I became more comfortable with the idea that understanding is an emerging process.

*'It is an 'untouchable process'. It happens inside me, sometimes at the most random moments. Ideas come and go, sometimes making more sense than other times. Things go through my head, I mull it over, and hope that suddenly I will 'see it'. Whatever 'it' may be.'* (Reflection 10-5-16)

The process of analysis felt as a challenging one:

*'The analysis stage has no clear endpoint nor a clear route ... It seems unsystematic, messy, unclear, and aimless ... Perhaps I ought to live without a plan for a while, accept there is no clear to do list beyond 'analysis', while being unaware when I will be finished and what it will look like when it is done. This however, is alien to me, and feels scary.'* (Reflection 10-5-16)

By being reflective on my own views and beliefs, as well as aiming constantly to have an open mind, I have intended to focus on understanding the views of the participants. The process of this study, from designing it to writing it down has been a journey for me in which my professional identity evolved into a balanced identity as both a nurse and a researcher. In addition, where I started out with a relatively black-and-white belief that CGAs are to be used everywhere, my views have become more nuanced and appreciative of different kinds of working and different views on these practices. In addition, the process of research has taught me to work in a less goal focused and structured manner, allowing myself to 'play with the data'. By doing this I learnt to appreciate the constructed multiple truths, as perceived by the participants, on how older people are assessed in hospital.

### 5.3.2 The research process

This section will include reflexive accounts of the following aspects of the research process: interviewing, observation, the process of reaching saturation, and the development of the Grounded Theory as presented in the previous chapter.

#### 5.3.2.1 Interviewing

The interview schedule initially was very broad (see Appendix 3), allowing for exploration of the topic. Throughout the data collection period questions were added, to explore what was emerging from the data:

*'Sometimes the things she [participant] said could lead to several sensible follow up ... . I did add these questions into the transcript in red and I have scribbled them onto my interview schedule. ... I like how Grounded Theory allows me to just add questions and shape my focus while I am on the go. It seems to provide more depth and perspective than using one list of questions during the whole study.'* (Reflection 19-5-15)

For instance, after the first interview with a professional the following questions were added: 1) If I say assessment, what does that mean to you, 2) Can you explain your experiences of admitting a patient, 3) What is a reason for you to do an assessment. These questions allowed the participant to explain their perspective, and the answers could be used to further develop the evolving theory.

Another example was around the informal assessment process, which was coming through in observations and interviews as an important aspect of assessing older people. Therefore, the following question was added to the schedule on 22-4-15: When you walk up to a patient, can you tell me what happens? This question appeared to open the conversation towards the informal ways of working.

The questions for patients also evolved as data were analysed and codes and categories were formed. In addition, questions which appeared to result in lively conversation were added or continued, such as: 1) When you arrived on the ward, what happened, 2) Can you tell about the communication with professionals, 3) Which professional do you see most often. If the patient struggled to answer a broad question, follow-up questions were asked regarding communication with professionals and specific assessments, for instance in relation to the first question mentioned above a follow-up question could be: Did they look at your skin?

Interviews were also reviewed by the supervisors who provided feedback. This was used for further reflection on the manner of interviewing:

*'Interview style OK, but try to follow their pace more, follow up what they say and link this back to my agenda.'* (Reflection 14-5-15)

The main feedback that changed my interviewing was after an interview that seemed particularly difficult:

*'At times it almost seems like I am testing her and that was absolutely not my intention.'*  
(Reflection 6-5-15)

Based on this advice was given to focus on experience and not on the knowledge the participant has regarding assessment practice. This resulted in richer data, as the participants seemed to be able to relax more into a conversation in which they could express their point of view freely.

*'Yesterday I transcribed the interview. ... The focus on experience and what she is trying to say is much better than in previous interviews where my focus seemed to be on knowledge more.'* (Reflection 19-5-15)

With time and experience, I was able to work from the developing grounded theory whilst using a less structured interviewing approach:

*'The focus on experience rather than knowledge seems to work better and I dare to do an interview without an interview schedule and having just a few questions/topics in my head.'* (Reflection 4-6-15)

This allowed me to follow the participant more than I did before, and it provided rich data to further develop the theory on assessing older people.

#### 5.3.2.2 Observation

Observation started at the patient's bedside and the focus was on professionals undertaking assessments of the patient, such as:

*'She [nurse] then attempts to stand him [patient] up, while he says: "I might need a little assistance here". She immediately reaches out, but soon asks HCP 1, who is nearby for a hand. While HCP 1 walks over she mumbles to HCP 7: "He rocks", and I see the patient leaning back and forth to get some 'speed' to get up. Both patient and HCP 1 give instructions to HCP 7 on how to mobilise the patient and HCP P7 is happy to just follow them.'* (Field notes 25-3-15)

This shows how a nurse gains information about the patient from both the patient and a colleague. Additionally, she doesn't necessarily ask first, but rather seems to get updated as they go along. However, such moments of assessments were scarce during sessions

with patients, due to included patients being relatively independent and healthy. After the first observation session I wrote:

*'It felt as though assessment mostly happened at the desk, away from the patient ... patients and staff existed on their own little islands ... I was mostly surprised by the absence of staff on the bay for the majority of the time. ... as a patient it must feel as though nothing is happening and you are just lying there in your bed, slightly isolated from the rest of the world.'* (Field notes 25-3-15)

With additional observation this initial view was strengthened:

*'It feels as though today I haven't seen much assessment. ... Again, I am surprised by how less is done with the patient. A lot of what staff does, seems to be done out of the patients' view and earshot, and the patient is informed at some point by one of the staff.'* (Field notes 16-4-15)

Therefore, the sessions were moved to the desk area. Additionally, ward rounds and hand overs were observed. During these sessions the focus was on the full process of assessment, from getting patient knowledge to acting on this knowledge. For instance, during a handover the observation focused on the transfer of patient knowledge from one nurse to another, as well as on the patient knowledge related statements where a source of this knowledge or an action based on this knowledge was mentioned:

*'At some point HCP 30 talks about communication she has had with a family member ... on the patient's baseline. ... After assessing someone's food intake HCP 30 said she found the patient to be storing food in the cheeks, at risk of aspiration. She said she changed the patient to a soft diet.'* (Field notes 14-7-15)

*'HCP 2 comes back, ringing family about discharge planning, gaining information from them about this. She scribbles the information she receives on a scrap piece of paper. Afterwards she updates HCP 29 on the outcome.'* (Field notes 15-11-15)

As data analysis continued, observations were undertaken with the evolving codes and categories in mind. For instance, as the code regarding informal practice was evolving, this was further developed in relation to the emerging framework. However, in general the focus remained on the way professionals gained, used and transferred knowledge about the patients.



### 5.3.2.3 Development of the Grounded Theory

After the first data collection had been conducted, the first analytical note stated:

*'Assessment cannot be seen as a static thing and I think it exists in several stages.'*

(Analytical notes 18-3-15)

This notion that assessment is not *'a static thing'*, with which I meant to describe a standardised and linear process, evolved into the main finding. At the start of analysis, two main codes were used. This included a code focusing on different types of assessment and a code regarding context related aspects to assessment. Therefore, from the start, assessment appeared heavily linked to its context. An example of coded raw data has been added in Attachment 15.

The idea of assessment as a fluid, non-static process was a concept that continued to evolve throughout the analysis process:

*'Not sure if assessment is a 'thing' that has boundaries. So far it seems it is continuous and ongoing in many different aspects of patient care.'* (Analytical notes 24-3-15)

After a few months the contextual aspect of assessment was grouped under the code *'Organised chaos'*. As this appeared to have a negative sound to it, the aim was to change the name, however the concept of interruption, an ad-hoc approach, and the need to adapt the assessment process to the context in which it took place, was developing as important aspects of assessing older people. The codes were revised over time and reorganised as the data set grew:

*'I had the following for codes to describe assessment: assessment with patient, assessment without patient, formal assessment (paperwork based), informal assessment (in HCP head). I felt I had to rewrite this after my last observation session, because I saw a HCP peak through a window to just look at the patient. Although this is not an assessment without a patient, it also is not an assessment with a patient, as patient is not necessarily engaged as the word 'with' assumes.'* (Reflection 19-11-15)

Despite such changes, the link between context and types of assessment seemed important and I aimed to understand how these could be connected. After speaking with supervisors about the existing codes at the time, the word navigating was in my mind. To clarify my thoughts and to explain the assessment process as I saw it in the data at that

time, I wrote a reflection in which I used an analogy in relation to navigating the waters when travelling the river with a sailboat, see page 166 and 167.

Navigating seemed to explain the place of different types of assessment in relation to contextual aspects of assessment and therefore became the overarching link between these codes. At this time, data collection and analysis was a fully integrated process:

*'I am getting busier and busier during an interview. Everything they say is added to the bulk of data that is already sitting in my head. I compare it, put things together, remember things, etc. More so than before, I get really tired during an interview. Same with transcribing, there is so much to think about when I go through the interview that it sometimes takes longer because I think about a new category or something.'* (Reflection 9-10-15)

This section of reflection shows how the analytical process become more intense as the data set grew and the conceptualisation of the assessment process was deepening.

Although the different types of assessment and the context were now pulled together in the term 'Navigating', there seemed to be a missing link:

*'I have started to rethink and reorganise the categories and codes. Somehow the balance seems wrong in what I had so far.'* (Personal email to supervisors, 13-12-15)

At that time 'Navigating' was the core category, and there were three categories 'Elements of assessment', 'Ways of working' and 'Daily ward life'. When comparing this to the coding tree presented on page 111, it shows these categories became codes instead as deeper conceptual layers of assessment were found in the data which became categories and pulled the codes together. For instance, as I had started writing up the analysis using quotations from the data, it appeared that communication was one of the lengthiest aspects. However, this was not represented in the codes as it was a sub-code at the time. This started the thought process that ended in the realisation that 'Networking' was a crucial aspect of navigating and should therefore be a category rather than a sub-code. Additionally, the contextual aspects appeared to include more than daily ward life, resulting in the category 'Situating the process'. The elements of assessment and the different ways of working were pulled together as they represented potentially complex assessment processes which are to be contained by professionals who undertake them. This resulted in the category 'Containing complexity'.

#### 5.3.2.4 Reaching saturation

Saturation of data in general, as well as in relation to recruitment and limitations of the study, have been discussed on page 230 onwards. Here the focus is on providing a reflexive account of the process of decision making in relation to saturation of data. Regarding patient observation, the field notes and reflections comment regularly on the lack of assessment with the patient and abundance of assessment away from the patient:

*'Assessment, although when I speak to the staff they tell me it happens all the time, when I am observing on a bay I am not seeing much of it.'* (Reflection 16-4-15)

At the end of data collection an additional observation session was undertaken with a patient to make sure nothing had been missed or overlooked.

Regarding patient interviews a similar approach was taken. Due to the limitations in patient recruitment, resulting in relatively well and independent patients taking part in the study, the data seemed to become saturated after eleven patient interviews. In a reflective summary to prepare for supervision I wrote:

*'I ... have eleven patient interviews ... I will try to get a few more interviews in the upcoming weeks ... but it does feel as though these data are also saturating. Most patients say the same things and during most interviews I realise new data are providing back-up to what I already know, but doesn't really provide anything new.'* (Reflection 12-11-15)

Four more interviews were undertaken, after which saturation seemed reached.

Observing professionals was deemed to reach saturation around a similar time as the patient interviews:

*'I am finding data I can add to what I already know, but I am not really finding new things anymore.'* (Reflection 12-11-15)

The observation sessions had been undertaken in a number of areas, including patient bays, desk area and offices. The location of the sessions was steered by findings from previous data. For instance, a session was done on a Saturday for the following reasons based on the findings up until that stage:

*'I was hoping this would give me some additional data regarding the role of nursing and nurses, ... whether a potential difference in atmosphere could highlight certain aspects of*

*the nature of the work, ... and a bit more insight into nurses updating the risk assessments and care plans, which they do during the weekend.'* (Field notes 21-11-15)

For professionals' interviews the theoretical saturation was also reflected upon along the way:

*'I think it is time to ... look at all my staff data ... . I think I still need an occupational therapist or a physiotherapist, a consultant, one more nurse and one more HCA. This would give me 21 interviews, and something tells me saturation might come up around that time. But we shall see.'* (Reflection 27-8-15)

After these additional interviews were done, I wrote:

*'I currently have 22 interviews and for the last six interviews it feels my data are saturating. ... I have decided to ... focus on the analysis now as I feel this part of the data is saturated. If needed I could always do some extra interviews when deeper analysis shows the need for further data.'* (Reflection 12-11-15)

## 5.4 Rigour of the study

Here the rigour of the study will be discussed using the criteria on trustworthiness and authenticity (Guba and Lincoln, 1989). In addition, as explained in section 3.4.1, the criteria of originality and usefulness, as listed by Charmaz (2014) in relation to evaluating a constructivist Grounded Theory, will be used.

### 5.4.1 Trustworthiness and authenticity

To enhance credibility several techniques suggested by Guba and Lincoln (1989) have been used. Credibility focuses on whether the findings represent the participants' points of view (Guba and Lincoln, 1989). Firstly, data have been collected over a prolonged period of twelve months in which the researcher has been in contact with professionals and patients on the ward. Secondly, data triangulation can be found in the use of a variety of methods, including observation, interviews, review of medical and nursing notes, and a focus group. Thirdly, via a focus group nearing the end of data collection the preliminary findings were presented to a group of six professionals to explore whether the interpretation of the findings resonated with their experiences.

Transferability and dependability have been enhanced by providing thick description, meaning a detailed description of the context, the participants, the methods used, the research process, and the findings (Guba and Lincoln, 1989).

Confirmability focuses on the data being the basis for the findings of the study (Guba and Lincoln, 1989). By using quotations from participants, the researcher has aimed to provide evidence directly from the data towards drawn conclusions and suggestions. In addition, the researcher has produced memos and field notes regarding the evolving analysis and argumentation (Lempert, 2007). She then aimed for a clear description of the findings, presenting logical interpretations found through constantly comparing the data (Charmaz, 2014).

Authenticity focuses on the awareness of constructed realities in relation to the findings (Guba and Lincoln, 1989). This has been demonstrated by writing field notes on a regular basis to enhance the researcher's awareness of her interpretation of and her influence in constructing reality. In addition, during regular supervisory meetings this topic has been discussed to make the researcher think critically about her own perspective in relation to the perspectives of the participants.

#### 5.4.2 Originality and usefulness

Originality focuses on how the findings of the study provide new insights, as well as adding to or challenging existing insights (Charmaz, 2014). The study presented in this thesis challenged the current focus on standardising and formalising assessment practice. The findings presented assessment as a navigating process, including different ways of working which are all valuable to assessing older people. The findings provided new insights into assessment as a navigating process, including formal, informal, invisible and visible ways of working. The original contributions to knowledge have been explained in more in more detail in section 5.2.

Usefulness of the study focuses on how the findings can be used, both in clinical work as well as research (Charmaz, 2014). The findings represented the daily assessment practice on a ward for older people, and provided insight in relevant aspects of navigation. Professionals may benefit from this knowledge as it may raise awareness of this process, including the different ways of working, networking and the relevance of context. This can lead to development of the skills professionals need to use these aspects to their full potential. Additionally, the study can may lead to further research. For instance, the

navigation of an assessment was found to be influenced on the patient's cognition. However, due to the ethics committee's decision regarding exclusion of patients with cognitive impairment as well as their relatives, perspectives of these groups on assessment practice remains unclear. Therefore, further study may be undertaken focusing on these groups. In addition, further study may focus on the invisible and informal processes, aiming to provide additional data on the content, use and value of these processes within daily assessment practice. Therefore, the findings are useful in both clinical work as well as research. In the recommendations section in Chapter 6 additional suggestions have been made regarding clinical practice and in relation to future research.

## 5.5 Strengths and limitations

In this section the strengths and limitations of this study and their implications in relation to the findings will be discussed.

Strengths of the study presented in this thesis include the choice of methodology and methods in relation to the research aim. As the aim of the study was to explore the assessment process from the perspectives of patients and professionals, the use of a constructivist Grounded Theory and qualitative methods have provided both a philosophical underpinning, as well as the 'tools' to do this. Data were collected over a year, allowing the researcher to build a relationship and rapport with the professionals working on the ward. This enhanced data collection and data content as professionals opened up more as time progressed. A large number of professionals from a range of disciplines took part in the study, allowing for a multi-disciplinary focus on assessment. Data analysis was conducted through constant comparing and coding and recoding of the data, allowing for a conceptual understanding of the complex activity of assessing older people. Theoretical saturation was reached, and the framework on navigating assessment of older people (Figure 3, page 164) has been grounded in the data.

The limitations of the study include that it has been conducted on one hospital ward, which means the findings are not necessarily transferrable to other settings. By providing a clear description of the findings and context, there is an opportunity for readers to decide for themselves how the study can be relevant to their individual situation (Charmaz, 2014).

Another limitation is related to how observation has been undertaken. When designing the study, the researcher chose to conduct observation according to the observer-participant role (Gold, 1958). Given the researcher's nursing experience and the high workload on hospital wards, a more participatory role in which a uniform should be worn and the researcher may take on responsibility for patient care and safety, could result in being so focused on clinical work that observation would become secondary. Therefore, the role of observer-participant seemed most suitable. Participants appeared comfortable with this and engaged with the researcher during the sessions, resulting in valuable observation data, which provided insight into the assessment process. However, during data collection and analysis the invisible and informal ways of working were found in the data. Although these aspects have come through as crucial parts of assessment with the chosen methods, a more participatory observer role may have resulted in additional 'insider's data' regarding these particular ways of working.

Three limitations of the study focus on the recruitment and participation of patients, including (1) the use of a convenience sample, (2) the number of patients declining participation and (3) the exclusion of patients with cognitive impairment. These three will be elaborated on in this section.

Regarding recruitment of patients, it was difficult to conduct this using the theoretical sampling procedure that was initially planned. As only patients without cognitive impairment were included, a large number of patients on the ward were excluded from the study. Therefore, the number of patients who could be approached was relatively low. In addition, a large number of patients (36 of 54 patients) declined participation for a variety of reasons (See Table 3 on page 111). Although theoretical sampling was intended (McCrae and Purssell, 2016), for practical reasons the researcher recruited patients based on availability, resulting in a convenience sample. Where possible analytical developments steered recruitment of new patients, but this was not always possible when several patients declined participation. However, it felt important to include all patients who were willing to participate, to hear their views on assessment practice and gain further understanding into their perspectives. Nonetheless, the convenience sampling procedure may have resulted in participation of a certain group of older people, for instance those who are least dependent or ill. Therefore, the sample does not necessarily represent the full target group.

The researcher found that most patients who were approached to participate in the study, were happy to share their story and provide information. However, of the 54 patients who were approached, eighteen were willing and did indeed sign a consent form. Several reasons were given for non-participation (Table 3, page 111). Some patients physically struggled to read the information sheets or sign the consent form due to long term health issues such as advanced Parkinson's Disease, arthritis, or poor eyesight. Other patients were discouraged by their relatives, or they felt too poorly or too tired to take part. Optimising recruitment of older people is important to understand care from their point of view (Harris and Dyson, 2001; Provencher, et al., 2014). Several articles, single studies as well as literature reviews, have addressed the challenges in recruitment of older people including Harris and Dyson (2001), Auster and Janda (2009), Wilding, et al. (2013), Michelet, Lund and Sveen (2014), Provencher, et al. (2014), and Piantadosi, et al. (2015). The challenges found in our study resonated with the ones presented in this literature, such as difficulty reading and/or understanding the information sheet and consent form, physical issues such as fatigue or illness, and family being unhappy with participation.

In the original application to the ethics committee both patients with and without cognitive impairment, as well as their relatives, were included. It seemed relevant to include both patient groups as it was assumed it could influence the perspectives on the assessment process undertaken with these patients, based on literature regarding the unique aspects of providing care for those with dementia (Kitwood and Bredin, 1992). In addition, evidence has been published regarding the prevalence of dementia amongst patients of 70 years and older admitted to hospital. Findings ranged from a third (Briggs, et al., 2016), 25-29% (Timmons, et al., 2015), and 42.4% (Sampson, et al., 2009) of these patients having dementia. The ethics committee, however, felt this study could be undertaken without including those with cognitive impairment. The researcher feels this has limited this study in the following way. During interviews with professionals it became clear that their answers around assessment often focused on how they approach people with cognitive impairment. By further probing the differences between assessing those with and those without cognitive impairment became clearer, and professionals often explained their approach had been shaped by the fact that there are so many people on their ward with cognitive impairment. Grounded in the data that were collected from professionals, a difference was found between navigating an assessment of a patient with and a patient without cognitive impairment. This, however, could not be explored from a



patient point of view. Additionally, the perspectives of carers of these patients could not be further explored due to the ethics committee's decision. Professionals often mentioned contacting these carers of patients with cognitive impairment to gain information or share information about the patient. It would have been valuable to explore the perspectives of the carers regarding this process, as currently the findings related to this topic represent only the perspective of the health care professional.

## 5.6 Summary

In this chapter the findings were placed within the body of literature. Key findings of this study included the social process of navigating within assessment practice, the use of different ways of working, the role of nurses at the centre of the networking system on the ward, and a relatively passive role for the patient within the navigation of assessments. Related tensions and challenges were discussed, including tensions between the advocated use of formal and standardised assessment, and the findings that professionals' value and use their informal practice to provide care. Another main tension discussed was around the role of the nurse moving away from the patient which left less trained professionals to do informal assessment which is based on tacit knowledge and experience. The rigour of the study was evaluated in relation to trustworthiness, authenticity, originality and usefulness. The strengths and limitations were presented, and in particular, the challenges regarding inclusion and recruitment of patients were discussed.

## Chapter 6: Conclusions and recommendations

---

In this final chapter the conclusions of the study are presented, followed by recommendations for research, practice, education, and policy.

### 6.1 Conclusions

The findings identified key tensions around a gap between the day-to-day reality of assessment and the ideal of what it should be. The study presented in this thesis focused on day-to-day reality and how current assessment practice was perceived by those involved, and the literature presented throughout this thesis tended to provide insight into an ideal picture. With this gap between the ideal and reality, there are two lines of argument that could be used to write the conclusions and recommendations. In this chapter the focus will mainly be on developing and working towards an ideal, based on the current reality.

#### 6.1.1 An ideal steeped in reality

In the following section conclusions will be drawn around the four key findings of this study regarding assessment practice on a ward for older people.

1. *Navigating is the central social process of assessing older people, which included strategies to contain complexity, constant networking, and the need to situate each process into its context. This means each assessment process may be done differently.*

The main message of this study is navigating as the key process of assessing older people. It presented assessment as a complex, flexible, context dependent, and social process. It requires highly skilled professionals, who focus on containing complexity, networking, and who situate each process into its context. In practice this means that each assessment can be conducted differently, as it is shaped by those involved within the moment it takes place. This understanding of assessment differs from the standardised and formalised approach advocated in the literature and guidelines (Ellis, et al., 2011; NHS, 2014). Navigating, therefore, is the result of professionals finding a way to make assessment work within the complex reality of a hospital ward for older people. In reality, professionals have to make things work within the confines of their situation and their resources. They aim to provide an adequate level of care whilst under pressure from competing demands, constantly changing patients' health status, individual patient

needs, and limited time (RCN, 2013; Dunn, McKenna and Murray, 2016; Maguire, Dunn and McKenna, 2016). Navigating is a way of doing just that.

2. *Strategies to contain the complexity of navigating an assessment included a variety of elements and different ways of working in relation to levels of formality, levels of visibility, as well as a separating and prioritising approach to care.*

The elements of assessment showed how each step of knowing, understanding, and if needed acting, can be undertaken in a variety of ways. These elements of assessment are embedded in different ways of working which have a range of levels regarding visibility and formality. Although the formal and visible approach is advocated by the literature and guidelines (NHS, 2014), professionals valued and often used a more informal and/or invisible approach. The current belief '*if it isn't written, it isn't done*' does not acknowledge the more invisible and informal skills used while assessing older people. These findings built on the literature regarding tacit knowledge, experience and invisibility of clinical practice (Schön, 1995; Weick, 1998; Benner, 2001; Canzan, et al., 2014; Allen, 2015). A main message of this study is regarding the importance of all different ways of working, including the invisible or informal approaches within the process of navigating assessment processes. Therefore, these ways of working need to be acknowledged as an integral and substantial part of clinical practice on a ward for older people. Professionals need to gain a vocabulary and an awareness of their invisible and informal practice, so voice may be given to their content (Allen, 2015). This might aid purposeful development and enhancement of informal and invisible skills and competencies. Professionals and researchers could collaborate towards this understanding and development.

To expect all assessment to be formalised is not realistic, although the importance of a visible, formal written record of patient care is clear (NMC, 2015). Informal ways of working were explained by professionals as constantly ongoing, which makes it impossible to document all of it at all times. Current formal documentation may need to be reviewed in light of the knowledge around different ways of working, aiming to find new technologies which may be helpful in recording results and findings from different ways of working. As an example, voice recorders or cameras were mentioned in the discussion as potential aids in capturing the ongoing process of informal ways of working. However, much is unknown about the use and implementation of innovative technologies in health care (Wu, et al., 2012; Nguyen, et al., 2015). Within the current documentation approach,

it is important to leave the opportunity for 'free writing' within the documentation so professionals are able to document their informal processes as they feel is necessary. If professionals are made aware of their informal practices, they gain an opportunity to reflect on it and purposefully use and develop these skills. As a result, their informal ways of working may become more visible within both verbal and written communication.

The visibility of practice, especially towards patients, could be enhanced. Further understanding and exploration is required regarding all invisible care undertaken on hospital wards, such as for instance teamwork (Hewitt, et al., 2015). Questions remain about the content and the use of these invisible activities, although their relevance is increasingly highlighted in the literature (Ebright, 2010; Maben, 2008; Hewitt, et al., 2015). Additionally, the divide of care tasks, such as HCAs providing most direct patient care, as well as the physical layout of wards with desk areas out of sight from the patient, might need revision to enhance visibility of all professionals to patients. Lastly, communication is key to enhance visibility of invisible process. Professionals need to be aware of these processes, and find a vocabulary to express it to those around them.

This study found professionals appeared to prioritise and separate comprehensive care processes into isolated tasks. This aspect of 'Containing complexity' was closely linked with hierarchy and specialisation within the multi-disciplinary team, which was presented as a part of the theme 'Networking'. More people have become involved in patient care and each discipline focused on particular aspects of care rather than on the whole process. This supported the literature regarding this topic (Aiken, et al., 2013; Ausserhofer, et al., 2014; Jones, 2016). The separated and prioritising approach to care seemed to allow professionals to work their way through a high workload, managing a number of competing demands. Although in an ideal world care ought to be comprehensive and person-centred (McCormack, et al., 2010) rather than task-centred, the current approach is a way professionals make assessment work whilst under pressure within a complex environment.

Nonetheless, separation of care can be reduced in a number of ways. Within the current system it seems possible to review the number of hierarchical layers and specialist disciplines currently involved with patient care. Reducing this number would inevitably reduce the separation of care as the information will then be held by less people and therefore may be less fragmented. This does mean that those closest to the patient should

be well-equipped and highly skilled to provide a wide range of care activities in order to keep the advanced skills currently provided by specialists (Ebright, 2010). This would enhance continuity of care, which in turn aids the use of informal ways of working. As the data showed how communication within the multi-disciplinary team and between patients and professionals focused on updating one another and sharing information, rather than discussing treatment and care from a variety of perspectives, it seems useful to allocate time towards discussing patients from a number of professional views, aiming to integrate the care at a deeper level (Sorrells-Jones, 1997). Additionally, documentation can be reviewed to reduce duplication both within and between disciplines. This could result in more cooperation and integration of care as professionals use and read one another's documents.

*3. Registered nurses were central to networking, as they focussed on gathering and sharing information from and with the multi-disciplinary team.*

At the centre of a complex system of communication, which was called the networking system, nurses were found. They used a large part of their time to gather and share information within the multi-disciplinary team. Nurses referred to this as '*chasing*', and at times this resulted in nurses feeling overwhelmed with the information they were managing. Despite the efforts made by the nursing team at the centre of the networking system, professionals from other disciplines did not see nurses as coordinators of care. Nurses seem well placed at the centre of the networking system to become coordinators of care. However, they may need support and training to change their efforts from '*chasing*' and gathering information, to coordinating care and collaboration within the multi-disciplinary team (Ehrlich, Kendall and St John, 2013).

Several professional participants mentioned that, as nurses focused on gathering information from the multi-disciplinary team, HCAs were found to do what nurses used to do, which is to provide most of the hands-on direct patient care. Nurses mentioned how they would appreciate to have more time available to provide direct patient care. However, the delegation of most direct patient care to HCAs seems to be stimulated by the UK government (Department of Health, 2015a) as they currently aim to implement the role of the associate nurse, which is placed between registered nurses and HCAs. Their presence should leave further time for registered nurses to focus on indirect patient care (Department of Health, 2015a). With the HCA focusing on hands-on patient care,

registered nurses often rely on them to provide information about the patient if anything seems out of the ordinary that needs following up, either by themselves or other registered professionals. This means that HCAs, who have received limited training, are to incorporate skilled and complex informal ways of working as they navigate assessment of older people. This presents a discrepancy between reality and the guidelines in which assessment is being mentioned as a specific trained nurses' competency (RCN, 2014). In addition, the experience and knowledge needed to conduct the informal way of working supports the need for registered nurses to spend time with their patients. Therefore, there appears to be a gap between HCAs' level of training and their responsibilities within day-to-day practice, potentially affecting quality of assessment practice. This links to Aiken, et al. (2016), who found the nurse-HCA balance to have an effect on patients' mortality rates. To guarantee safe patient care it is crucial to make sure all professionals are equipped to do what is expected of them, and they should be provided with adequate training and supervision in clinical practice.

The role of the nurses appears to be changing over time (Maben and Griffiths, 2008; Allen, 2015; Tutton and Langstaff, 2015). Nurses seem to have lost their roots as they are moving away from direct hands-on care, reshaping their identity within a multi-disciplinary, separated, and complex care environment. Although the importance of gathering and sharing information within the multi-disciplinary is not to be diminished, the importance of nurses providing hands-on direct patient care has also been argued (Ebright, 2010; Aiken, et al., 2016). The nurses participating in the current study, mentioned they would like more time to play a more active role in the provision of hands-on patient care. In this study the importance of nurses providing such direct care, was related specifically to their skills regarding the informal and potentially invisible assessment practice. However, each shift has only so much time, and the profession is bound to the current set up of the health care system within the NHS, including for instance specialisation and hierarchy. The role of the nurse within the current health care system requires clarity and realistic expectations. Therefore, a balance where nurses continue their role at the centre of the networking system, as well as focus part of their attention towards direct patient nursing care seems sensible. This balance can only be found in practice if nurses are given sufficient support, time, training and resources to be able to combine these two aspects of care.

4. *Patients had a passive role within the assessment processes on this ward for older people, and they expressed different preferences regarding their level of involvement in decision making.*

Patient's individual needs were taken into account whilst professionals navigated an assessment, and the knowledge on which the assessment was done was knowledge about the patient. However, throughout the findings the role of the patient within the navigating process of assessment was found to be passive.

Patients struggled to know who was involved in their care process and who was responsible for which aspect of it. This resulted, at least in part, from separation of care due to specialisation and hierarchy. They requested enhanced collaboration between different disciplines, similar to what was found by, for instance, Hewitt, et al. (2015a). Patients are entitled to clarity and therefore professionals need to make sure they communicate regularly with patient, and make sure patients do not receive confusing or contradictory information.

A main message from this study is that each patient seemed to have a different preference regarding their role within the network. Some were happy with being informed about decisions, whereas others felt they preferred to be more involved into the decision-making process. Subsequently, discussing and reviewing individual patient preferences during an admission in hospital is important to meet each patient's needs. In this study professionals seemed willing to accommodate patient involvement, however when linking this to the contextual issues of a prioritising approach to care due to limited time, it may be difficult for them to implement this into practice. In the study presented in this thesis, time to communicate with patients was found to be limited by both professionals and patients, as priorities focused on providing acute medical care. To include older people into the decision-making process, it is important to acknowledge the time this may take with patients who have different levels of cognitive functioning resulting in different abilities to understand information and make decisions based on this information (Bastiaens, et al., 2007; Peters, et al., 2007).

### 6.1.2 Changing reality to meet the ideal

The focus in the previous section was on developing current practice, working towards and ideal which is based on realistic aims. However, another line of argument could be to suggest practice should change to meet the theoretical ideals of care. The literature as presented in

previous chapters provides insight into what this might look like, including PCC, SDM, integrated teamwork and CGA. In this ideal picture, care is formalised and standardised, and it does not need to be separated and prioritised as there are sufficient resources and professionals who do not struggle for time. Additionally, patients who wish to have an active say in the process of care during their admission, are able to voice it. However, the findings from this study regarding current practice have challenged this ideal picture. Therefore, to reach this ideal of a fully integrated CGA approach to assessment according to the 'gold standard', in-depth change is needed that goes beyond the surface of the current NHS environment down to its very core.

In the discussion Primary Nursing has been mentioned as a potential model of care that could result in in-depth changes regarding continuity of care and person-centredness (Manthey, 1980; Tutton and Langstaff, 2015). For instance, it might enable nurses to move closer to their patients, as they would be responsible for fewer patients whilst undertaking more aspects of care for these patients (Manthey, 1980). Additionally, nurses can also continue their work at the centre of the multi-disciplinary network, developing their approach from '*chasing*' towards coordination of care. Eventually, this may result in a less fragmented approach to care, and enhanced assessment practice in particular in relation to the informal ways of working, due to improved continuity of care.

The focus within the NHS currently, seems to be on increasing the numbers of supporting practitioners rather than increasing the numbers of qualified and registered professionals. There is now a move to stretch current resources towards a seven-day service (Department of Health, 2015a; 2015b; Maguire, Dunn and McKenna, 2016). Therefore, in the current context of the NHS, it seems unrealistic to expect an in-depth change where assessment is a fully integrated 'gold standard' approach.

## 6.2 Recommendations

In this section the study findings and conclusions will be translated into recommendations for four areas, including research, clinical practice, education, and health care policy. This section will be focusing on the specific recommendations based on the argument around creating an ideal that is steeped in reality. The recommendations will be presented for each of the four areas, although there is overlap between them.



### 6.2.1 Clinical practice

- To utilise and develop all aspects of ongoing assessment practice within care for older people, a raised awareness of the social process of navigating is required. This provides the opportunity to reflect on, explain, purposefully use and develop skills in relation to navigating assessment processes.
- Professionals need to be aware of the different ways of working they incorporate in practice, including formal, informal, visible and invisible approaches. This may result in reflection, explanation, purposeful use, and development of these ways of working. Making these processes explicit may facilitate improved networking on the ward through clearer communication of all different processes.
- Documentation needs to be reviewed in light of different ways of working to enable a better fit between documentation and current practice. New technology could be tested and used if appropriate, such as voice recorders and cameras, to record ongoing informal and/or invisible practice.
- To reduce separation of care and stimulate an integrated approach to care, a formal meeting could be incorporated into the weekly ward routine in which patients are discussed from an in-depth multi-disciplinary point of view.
- Documentation needs to be reviewed in relation to duplication, aiming towards an efficient and integrated approach to the use of paperwork within the multi-disciplinary team.
- Nurses need resources and support to find a balance between fulfilling their duties regarding sharing and gathering information and providing direct patient care, as the latter aims to enhance informal ways of assessing and reduce the separation of care processes into isolated tasks.
- To acknowledge each individual patient's preference regarding their involvement in their assessment process, professionals should assess this throughout the patient's admission and resources should support accommodation of individual patient preferences.

### 6.2.2 Education

- Awareness of assessment as a navigating process including different ways of working, should start during training for health care professionals, such as HCAs, student nurses, medical students, and student therapists. Expert professionals, who have learnt to reflect, understand and explain informal and invisible practice,

may be able to provide examples to teach the different ways of working they utilised when assessing older people.

- To facilitate HCAs to continue their current practice and responsibilities related to their role within direct hands-on patient care, including informal ways of assessing older people, it is essential for them to receive training accordingly as this aspect of assessment practice requires a thorough understanding of patients' care needs.
- For professionals to incorporate patient preferences regarding their involvement within the assessment process, education about the importance, implications and consequences of providing such personalised communication towards patients may equip those in the field to adequately understand each patient's needs and wishes, and subsequently provide tailored care to their patients.
- To develop the role nurses' have at the centre of the networking system, they require relevant competencies and skills. This may result in moving away from a gathering and sharing approach towards a more coordinating role, which needs support and collaboration from the multi-disciplinary team to succeed.
- To reduce the separation of care processes into isolated tasks, registered nurses on wards for older people could specialise specifically in this field, facilitating in-depth knowledge and skills close to the patient's bedside. Nurses need to find a balance in which they provide direct hands-on care as well as continue at the centre of networking. This could reduce the number of professionals involved and would support the nurse in developing a relationship with the patient in which the informal ways of working may flourish.

### 6.2.3 Research

- To gain further understanding into the invisible and informal processes taking place within the care of older people, further study could add clarity on this practice. For instance, professionals need a vocabulary to explain their invisible and informal assessment practice. Research could create such a vocabulary, in which different aspects of assessment practice can be highlighted and magnified through discussion and explanation by professionals.
- To enable older people to be involved in the decision making process regarding their care and treatment as they wish, further study could provide additional insight into the nuances of this aspect of patient care.

- To develop current recruitment strategies of older people into research studies, further understanding on this topic is needed. For instance, the content and length of information sheets and consent forms needs reviewing in relation to patients' reasons for declining participation, as well as the role of family members in relation to older people declining or agreeing to participation.
- To gain insight into the perspectives of patients with cognitive impairment and their relatives on the assessment process on ward for older people, a specific study could be conducted in which the focus is on these target groups.

#### 6.2.4 Policy

- Awareness of assessment as a navigating process, could be supported by noting this complex process and the required skills to undertake it, in official documents focusing on professionals' competencies, such as 'The code' for nurses (NMC, 2014) and 'Outcomes and standards for undergraduate medical education' for physicians (GMC, 2009).
- Practice guidelines which currently focus on the 'gold standard' of CGA, should highlight the inconsistent results regarding the effectiveness of CGAs on patient outcomes, and the lack of evidence regarding their effect on, for instance, care processes, use of resources, and teamwork. Additionally, they could include evidence on the importance of context related issues in health care, such as time pressure and financial strain, and the importance of different ways of working. This may result in less of a gap between current guidelines regarding assessing older people and daily practice.
- To enhance a better fit between daily practice and documentation, policies could advocate the development and use of different kinds of technology or documentation that can be used within practice.
- Policies could be more specific in relation to the individual patient preferences regarding their involvement in care and treatment decisions. These differences have been identified in the literature as well as in this study. Rather than advocating for all patients to be active in the process, a more individually focused approach could be suggested in which this subject could be added to the admission documentation used by health care professionals.

## 6.3 The last word

Assessing older people has been explored within this study and was explained as the social process of navigating. One professional summarised the process:

*'Think of every day as a piece of jigsaw ... if it is incomplete, you don't know entirely what is going on, it doesn't give you the full picture. When the jigsaw is complete you have a full picture ... the more you know about your patient, the better.'* (Junior nurse 29)

Another professional concluded:

*'So, for me an assessment, I think it is quite a powerful thing really ... I am making decisions about somebody and I am making suggestions that will have an impact on their life.'* (Allied HCP 53)

Navigating an assessment process is as complex as it is powerful. What should never be forgotten is that, at its most simple, assessment is about providing good and safe patient care:

*'Everybody ... has made it as nice as it could be, to be in here .... I have been texting my sisters and children and grandchildren ... "Don't worry ... about me because I am OK, I'm safe".'* (Patient 9)

*'I know it is perhaps not a nice experience for people to go into hospital, but ... you will be treated with kindness and care and understanding. You cannot ask for anything more.'* (Patient 17)

## 6.4 A final thought

---

### **The heart of assessment**

---

Assessment exists in-between  
the moment of seeing and the moment of being seen.

It exists in-between knowing and being known,  
it is connecting and interacting, no-one stands alone.

An unparalleled string of questions and answers,  
some expressed in words, others just a glance,  
finding its unique rhythm  
to a freely choreographed dance.

Encapsulated in its context, it never stands alone.

Each process eventually a design of its own.

Formal and informal ways weaved into one,  
some of the work invisibly done.

Standardising and formalising,  
the world is robot-bound.

But at the heart of assessment,  
only people are found.

---

## References

---

- Abellan van Kan, G., Rolland, Y., Houles, M., Gillette-Guyonnet, S., Soto, M. and Vellas, B., 2010. The assessment of frailty in older adults. *Clinics in Geriatric Medicine*, 26(2), pp.275-86.
- Ahmed, N.N. and Pearce, S.E., 2010. Acute care for the elderly: a literature review. *Population Health Management*, 13(4), pp.219-25.
- Aiken, L.H., Sloane, D.M., Bruyneel, L., Van den Heede, K. and Sermeus, W., 2013. Nurses' reports of working conditions and hospital quality of care in 12 countries in Europe. *International Journal of Nursing Studies*, 50(2), pp.143-53.
- Aiken, L.H., Sloane, D.M., Bruyneel, L., Van den Heede, K., Griffiths, P., Busse, R., Diomidous, M., Kinnunen, J., Kózka, M., Lesaffre, E., McHugh, M.D., Morenao-Casbas, M.T., Rafferty, A.M., Schwendimann, R., Scott, P.A., Tishelman, C., Van Achterberg, T. and Sermeus, W., 2014. Nurse staffing and education and hospital mortality in nine European countries: a retrospective study. *Lancet*, 383(9931), pp.1824-30.
- Aiken, L.H., Sloane, D.M., Griffiths, P., Rafferty, A.M., Bruyneel, L., McHugh, M.D., Maier, C.B., Morenao-Casbas, M.T., Ball, J.E., Ausserhofer, D. and Sermeus, W., 2016. Nursing skill mix in European hospitals: cross-sectional study of the association with mortality, patient ratings, and quality of care. *BMJ Quality & Safety*, 0: 1-10. doi: 10.1136/bmjqs-2016-005567.
- Alimo-Metcalfe, B. and Alban-Metcalfe, J., 2005. Leadership: Time for a new direction? *Leadership*, 1(1), pp.51-71.
- Allen, D., 1997. The nursing-medical boundary: a negotiated order? *Sociology of Health and Illness*, 19(4), pp.498-520.
- Allen, D., 2007. What do you do at work? Profession building and doing nursing. *International Nursing Review*, 54(1), pp.41-8.
- Allen, D., 2015. *The invisible work of nurses: Hospitals, organisations and healthcare*. London: Routledge.
- Allen, K. and Turner, T., 2008. Effectiveness of acute care of the elderly (ACE) units. *South Health*: pp.1-24.

Amador, L.F., Reed, D. and Lehman, C.A., 2007. The acute care for elders unit: taking the rehabilitation model into the hospital setting. *Rehabilitation Nursing: the Official Journal of the Association of Rehabilitation Nurses*, 32(3), pp.126-32.

Aminzadeh, F., 2000. Adherence to recommendations of community-based comprehensive geriatric assessment programmes. *Age and Ageing*, 29(5), pp.401-7.

American Nursing Association, 2016. *The nursing process*. [online] Maryland: American Nursing Association. Available at: <http://www.nursingworld.org/EspeciallyForYou/What-is-Nursing/Tools-You-Need/Thenursingprocess.html> [Accessed 27 January 2017].

Applegate, W.B., Miller, S.T., Graney, M.J., Elam, J.T., Burns, R. and Akins, D.E., 1990. A randomized, controlled trial of a geriatric assessment unit in a community rehabilitation hospital. *New England Journal of Medicine*, 322(22), pp.1572-8.

Applegate, W., Deyo, R., Kramer, A. and Meehan, S., 1991. Geriatric evaluation and management: current status and future research directions. *Journal of the American Geriatrics Society*, 39(S1), pp.2S-7S.

Asplund, K., Gustafson, Y., Jacobsson, C., Bucht, G., Wahlin, A., Peterson, J., Blom, J.O. and Angquist, K.A., 2000. Geriatric-based versus general wards for older acute medical patients: a randomized comparison of outcomes and use of resources. *Journal of the American Geriatrics Society*, 48(11), pp.1381-8.

Atkinson, P. and Hammersley, M., 1994. Ethnography and participant observation. In: N.K. Denzin and Y.S. Lincoln, eds. 1994. *Handbook of qualitative research*. Thousand Oaks, CA: SAGE Publishing. pp.248-61.

Atkinson, P. and Hammersley, M., 2007. *Ethnography, principles in action*. 3<sup>rd</sup> ed. New York: Routledge.

Aucella, F., Stoico, L., Cichella, A., Gesuete, A., Greco, A., Grandaliano, G. and Pilotto, A., 2012. Comprehensive geriatric assessment in the hemodialysis elderly population. *Journal of Nephrology*, 25(Suppl 19), pp.S85-9. doi: 10.5301/jn.5000223.

Ausserhofer, D., Zander, B., Busse, R., Schubert, M., De Geest, S., Rafferty, A.M., Ball, J., Scott, A., Kinnunen, J., Heinen, M., Sjetne, I.S., Morena-Casbas, T., Kózka, M., Lindqvist, R., Diomidous, M., Bruyneel, L., Sermeus, W., Aiken, L.H. and Schwendimann, R., 2014. Prevalence, patterns and predictors of nursing care left undone in European hospitals:

results from the multicountry cross-sectional RN4CAST study. *BMJ Quality & Safety*, 23(2), pp.126-35.

Auster, J. and Janda, M., 2009. Recruiting older adults to health research studies: A systematic review. *Australasian Journal on Ageing*, 28(3), pp.149-51.

Australian Commission on Safety and Quality in Health Care, 2010. *Patient-centred care: Improving quality and safety by focusing care on patients and consumers. Discussion paper*. [online] Available at: <http://www.safetyandquality.gov.au/wp-content/uploads/2012/01/PCCC-DiscussPaper.pdf> [Accessed 23 July 2014].

Bachmann, S., Finger, C., Huss, A., Egger, M., Stuck, A.E. and Clough-Gorr, K.M., 2010. Inpatient rehabilitation specifically designed for geriatric patients: systematic review and meta-analysis of randomised controlled trials. *British Medical Journal*, 340, c1718. doi: 10.1136/bmj.c1718.

Bacon, F., 1605. *The advancement of learning*. Edited by S.J. Gould, 2001. New York: Modern Library.

Bacon, F., 1620. *Novum Organum*. Translated from Latin by P. Urbach and J. Gibson, eds., 1994. Chicago: Open Court.

Baker, S.E. and Edwards, R., eds. 2012. *How many qualitative interviews is enough? Expert voices and early career reflections on sampling and cases in qualitative research*. [pdf] Southampton: National Centre for Research Methods/ Swindon: Economic and Social Research Council. Available at: [http://eprints.ncrm.ac.uk/2273/4/how\\_many\\_interviews.pdf](http://eprints.ncrm.ac.uk/2273/4/how_many_interviews.pdf) [Accessed 10 February 2017].

Bakker, F.C., Robben, S.H. and Olde Rikkert, M.G., 2011. Effects of hospital-wide interventions to improve care for frail older inpatients: a systematic review. *BMJ Quality & Safety*, 20(8), pp.680-91.

Bakker, F.C. and Olde Rikkert, M.G.M., 2015. Hospital care for frail elderly adults: From specialized geriatric units to hospital-wide interventions. *Interdisciplinary Topics in Gerontology and Geriatrics*, 41, pp.95-106.

Bardis, P.D., 1978. Social interaction and social processes. *Social Science*, 54(3), pp.146-67.



Barratt, A., 2008. Evidence based medicine and shared decision making: The challenge of getting both evidence and references into health care. *Patient Education & Counseling*, 73(3), pp.407-12.

Barry, P.P., 1994. Geriatric clinical training in medical schools. *The American Journal of Medicine*, 97 (4A), pp.8S-9S.

Barton, A. and Mulley, G., 2002. History of the development of geriatric medicine in the UK. *Postgraduate Medical Journal*, 79(930), pp.229-34.

Basic, D., Conforti, D.A. and Rowland, J., 2002. Standardised assessment of older patients by a nurse in an emergency department. *Australian Health Review*, 25(4), pp.50-8.

Basic, D. and Conforti, D.A., 2005. A prospective, randomised controlled trial of an aged care nurse intervention within the Emergency Department. *Australian Health Review*, 29(1), pp.51-9

Bastiaens, H., Van Royen, P., Rotar Pavlic, D., Raposo, V. and Baker, R., 2007. Older people's preferences for involvement in their own care: A qualitative study in primary health care in 11 European countries. *Patient Education and Counseling*, 68(1), pp.33-42.

Bate, L., Hutchinson, A., Underhill, J. and Maskrey, N., 2012. How clinical decisions are made. *British Journal of Pharmacology*, 74(4), pp.614-20.

Bate, P., 2014. Context is everything. In: P. Bate, G. Robert, N. Fulop, J. Øvretveit and M. Dixon-Woods, eds. 2014. *Perspectives on context, a selection of essays considering the role of context in successful quality improvements*. London: Health Foundation. pp.1-30.

Bate, P., Robert, G., Fulop, N., Øvretveit, J. and Dixon-Woods, M., 2014. *Perspectives on context, a selection of essays considering the role of context in successful quality improvements*. London: Health Foundation.

Bate, S.P., Mendel, P. and Robert, G., 2008. *Organising for quality: the improvement journeys of leading hospitals in Europe and the United States*. Oxford: Radcliffe.

Baumbusch, J., Leblanc, M.E., Shaw, M. and Kjørven, M., 2016. Factors influencing nurses' readiness to care for hospitalised older people. *International Journal of Older People Nursing*, 11(2), pp.149-59.

- Baztán, J.J., Suarez-Garcia, F.M., Lopez-Arrieta, J., Rodriguez-Manas, L. and Rodriguez-Artalejo, F., 2009. Effectiveness of acute geriatric units on functional decline, living at home, and case fatality among older patients admitted to hospital for acute medical disorders: Meta-analysis. *British Medical Journal*, 338(7690), pp.334-6.
- Beauchet, O., Launay, C.P., Merjagnan, C., Kabeshova, A. and Annweiler, C., 2014. Quantified self and comprehensive geriatric assessment: older adults are able to evaluate their own health and functional status. *PloS One*, 9(6), e100636.
- Bellury, L., Hodges, H., Camp, A. and Aduddell, K., 2016. Teamwork in acute care: Perceptions of essential but unheard assistive personal and the counterpoint of perceptions of registered nurses. *Research in Nursing & Health*, 39(5), pp.337-46.
- Benner, P., 2001. *From novice to expert: Excellence and power in clinical nursing practice. Commemorative Edition*. New Jersey: Prentice Hall Health.
- Berkeley, G., 1710. *A treatise concerning the principles of human knowledge*. Edited by T.J. McCormack, 2003. New York: Dover Publications.
- Bernabei, R., Venturiero, V., Tarsitani, P. and Gambassi, G., 2000. The comprehensive geriatric assessment: when, where, how. *Critical Reviews in Oncology and Hematology*, 33(1), pp.45-56.
- Bernabei, R., Landi, F., Onder, G., Liperoti, R. and Gambassi, G., 2008. Second and third generation assessment instruments: the birth of standardization in geriatric care. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*, 63A(3), pp.308-13.
- Biesta, G., 2010. Pragmatism and the philosophical foundations of Mixed Method Research. In: A. Tashakkori and C. Teddlie, eds. 2010. *Mixed Methods in Social and Behavioral Research*. Thousand Oaks, CA: SAGE Publishing. pp.95-118.
- Blomberg, A.C., Bisholt, B., Nilsson, J. and Lindwall, L., 2015. Making the invisible visible – operating theatre nurses' perceptions of caring in perioperative practice. *Scandinavian Journal of Caring Sciences*, 29(2), pp.361-8.
- Blumer, H., 1969. *Symbolic interactionism: Perspective and method*. Berkeley: University of California Press.

Boltz, M., Capezuti, E., Boawr-Ferres, S., Norman, R., Secic, M., Kim, H., Fairchild, S., Mezey, M. and Fulmer, T., 2008. Changes in the geriatric care environment associated with NICHE (Nurses improving care for Healthsystem Elders). *Geriatric Nursing*, 29(3), pp.176-85.

Bookey-Bassett, S., Markle-Reid, M., Mckey, C.A. and Akhtar-Danesh, N., 2017. Understanding interprofessional collaboration in the context of chronic disease management for older adults living in the communities: a concept analysis. *Journal of Advanced Nursing*, 73(1), pp.71-84.

Bower, M., 1966. *The will to manage; corporate success through programmed management*. New York: McGraw-Hill.

Boyd, M., Koziol-McLain, J., Yates, K., Kerse, N., McLean, C., Pilcher, C. and Robb, G., 2008. Emergency department case-finding for high-risk older adults: the Brief Risk Identification for Geriatric Health Tool (BRIGHT). *Academic Emergency Medicine*, 15(7), pp.598-606.

Breckenridge, J.P., Jones, D., Elliott, I. and Nicol. M., 2012. Choosing a methodological path: reflections on the constructivist turn. *The Grounded Theory Review*, 11(1), pp.64-71.

Brentano, F., 1887. *Descriptive Psychology*. Translated from German and edited by B. Müller, 1995. London: Routledge.

Bridgen, P., 2001. Hospitals, geriatric medicine, and the long-term care of elderly people 1946-1976. *Social History of Medicine*, 14(3), pp.507-23.

Briel, M., Young, J., Tschudi, P., Hugenschmidt, C., Bucher, H.C. and Langewitz, W., 2007. Shared-decision making in general practice: Do patients with respiratory tract infections actually want it? *Swiss Medical Weekly*, 137(33-34), pp.483-5.

Briggs, R., Dyer, A., Nabeel, S., Collins, R., Doherty, J., Coughlan, T., O'Neill, D. and Kennelly, S.P., 2016. Dementia in acute hospital: the prevalence and clinical outcomes of acutely unwell patients with dementia. *QJM and International Journal of Medicine*, 110(1), pp.33-7.

British Geriatrics Society, 2014. *Fit for Frailty. Consensus best practice guidance for the care of older people living with frailty in community and outpatient settings*. [pdf]

London: British Geriatrics Society. Available at:

[http://www.bgs.org.uk/campaigns/fff/fff\\_full.pdf](http://www.bgs.org.uk/campaigns/fff/fff_full.pdf) [Accessed 4 February 2017].

British Geriatrics Society, 2016. *Workstream 2.1: Where is CGA provided in the UK?*

[online] London: British Geriatrics Society. Available at: <http://www.bgs.org.uk/future-bgs-confs/how/wrk2?jij=1488626630728> [Accessed 4 March 2017].

British Medical Association, 2017. *More than a third of doctors fall asleep while driving.*

[online] London: BMA. Available at: <https://www.bma.org.uk/news/2017/january/more-than-a-third-of-doctors-fall-asleep-while-driving>. [Accessed 30 October 2017].

Brooks, J., 2009. 'The geriatric hospital felt like a backwater': aspects of older people's nursing in Britain, 1955-1980. *Journal of Clinical Nursing*, 18(19), pp.2764-72.

Brooks, J., 2011. Managing the burden: nursing older people in England, 1955-1980. *Nursing Inquiry*, 18(3), pp.226-34.

Brown, J.B., Lewis, L., Ellis, K., Stewart, M., Freeman, T.R. and Kaperski, J. 2009.

Mechanisms for communicating within primary care teams. *Canadian Family Physician*, 55(12), pp.1216-22.

Bryant, A., 2002. Re-Grounding Grounded Theory. *The Journal of Information Technology Theory and Application (JITTA)*, 4(1), pp.25-42.

Bryant, A. and Charmaz, K. eds., 2007. *The SAGE Handbook of Grounded Theory*.

Thousand Oaks, CA: SAGE Publishing.

Bryant, A., 2009. Grounded Theory and pragmatism: the curious case of Anselm Strauss.

*Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 10(3), Art. 2.

Available at: <http://www.qualitative-research.net/index.php/fqs/article/view/1358/2850> [Accessed 27 March 2017].

Bytheway, B., 1995. *Ageism*. Buckingham: Open University Press.

Cantril, C. and Haylock, P.J., 2013. Patient navigation in the oncology care setting.

*Seminars in Oncology Nursing*, 29(2), pp.76-90.

- Canzan, F., Heilemann, M.V., Mortari, L. and Ambrosi, E., 2014. Visible and invisible caring in nursing from the perspectives of patients and nurses in the gerontological context. *Scandinavian Journal of Caring Studies*, 28(4), pp.732-40.
- Caplan, G.A., Williams, A.J., Daly, B. and Abraham, K., 2004. A randomized, controlled trial of comprehensive geriatric assessment and multidisciplinary intervention after discharge of elderly from the emergency department--the DEED II study. *Journal of the American Geriatrics Society*, 52(9), pp.1417-23.
- Carpenter, G.I., Teare, G.F., Steel, K., Berg, K., Murphy, K., Bjornson, J., Jonsson, P.V. and Hirdes, J.P., 2001. A new assessment for elders admitted to acute care: reliability of the MDS-AC. *Aging: Clinical and Experimental Research*, 13(4), pp.316-30.
- Carpenter, I., 1998. Standardised assessment in the community. In: D. Challis, R. Darton and K. Stewart, eds. 1998. *Community care, secondary health care and care management*. University of Kent at Canterbury: Ashgate Publishing Ltd. pp.89-116.
- Carper, B.A., 1978. Fundamental patterns of knowing in nursing. *Advances in Nursing Science*, 1(1), pp.13-24.
- Cathro, H., 2016. Navigating through chaos. Charge nurses and patient safety. *The Journal of Nursing Administration*, 46(4), pp.208-14.
- Cefalu, C.A., 1996. Adhering to inpatient geriatric consultation recommendations. *The Journal of Family Practice*, 42(3), pp.259-63.
- Chadborn, N., Sands, G., Tuomainen, H. and Gladman, J., 2015. Systematic review of EASY-care needs assessment for community-dwelling older people. *Age and Ageing*, 44(4), pp.559-65.
- Challis, D., Abendstern, M., Clarkson, P., Hughes, J. and Sutcliff, C., 2010. Comprehensive assessment of older people with complex care needs: the multi-disciplinarity of the Single Assessment Process in England. *Ageing & Society*, 30, pp.1115-34.
- Challis, D., Hughes, J., Xie, C. and Jolley, D., 2014. An examination of factors influencing delayed discharge of older people from hospital. *International Journal of Geriatric Psychiatry*, 29(2), pp.160-8.
- Charmaz, K., 2006. *Constructing Grounded Theory*. Thousand Oaks, CA: SAGE Publishing.

Charmaz, K., 2008. Constructionism and the Grounded Theory Method. In: J.A. Holstein and J.F. Gubrium, eds. *Handbook of constructionist research*. New York: The Guilford Press. pp.397-412.

Charmaz, K., 2014. *Constructing Grounded Theory*. 2<sup>nd</sup> ed. Thousand Oaks, CA: SAGE Publishing.

Chartered Society of Physiotherapy, 2011. *Code of members' professional values and behaviour*. [online] London: CSP. Available at:

[file:///Users/hw6/Downloads/csp\\_code\\_of\\_professional\\_values\\_behaviour\\_full.pdf](file:///Users/hw6/Downloads/csp_code_of_professional_values_behaviour_full.pdf)

[Accessed 28 October 2017].

Chiu, C., Feuz, M.A., McMahan, R.D., Miao, Y. and Sudore, R.L., 2016. "Doctor, make my decisions": Decision control preferences, advance care planning, and satisfaction with communication among adverse older adults. *Journal of Pain and Symptom Management*, 51(1), pp.33-40.

Clark, A., 2006. *Anonymising research data*. [pdf] Leeds: ESRC National Centre for Research Methods. Available at:

[http://eprints.ncrm.ac.uk/480/1/0706\\_anonymising\\_research\\_data.pdf](http://eprints.ncrm.ac.uk/480/1/0706_anonymising_research_data.pdf) [Accessed 30

March 2017].

Clark, N.M., Nelson, B.W., Valerio, M.A., Gong, Z.M., Taylor-Fishwick, J.C. and Fletcher, M., 2009. Consideration of shared decision making in nursing: A review of clinicians' perceptions and interventions. *The Open Nursing Journal*, 3, pp.65-75.

Clayman M.L. and Makoul, G., 2009. Conceptual variation and iteration in shared decision-making: the need for clarity. In: A. Edwards and G. Elwyn, eds. 2009. *Shared Decision-Making in Health Care, achieving evidence-based patient choice*. 2<sup>nd</sup> ed. Oxford: University Press. pp.117-22.

Clegg, A., Young, J., Iliffe, S., Olde Rikkert, M. and Rockwood, K., 2013. Frailty in elderly people. *Lancet*, 381(9868), pp.752-62.

Clements, D., Dault, M. and Priest, A. 2007. Effective teamwork in healthcare: research and reality. *Healthcare Papers*, 7(Spec No), pp.26-34.

Clerencia-Sierra, M., Calderón-Larrañaga, A., Martínez-Velilla, N., Vergara-Mitxeltoarena, I., Aldaz-Herce, P., Poblador-Plou, B., Machón-Sobrado, M., Egüés-Olazabal, N., Abellán-

van Kan, G. and Prados-Torres, A., 2015. Multimorbidity patterns in hospitalized older patients: Associations among chronic diseases and geriatric syndromes. *PloS ONE*, 10(7), pp.e0132909. doi: 10.1371/journal.pone.0132909.

Clissett, P., Porock, D., Harwood, R.H. and Gladman, J.R., 2013. The challenges of achieving person-centred care in acute hospitals: a qualitative study of people with dementia and their families. *International Journal of Nursing Studies*, 50(11), pp.1495-503.

Clynch, N. and Kellett, J., 2015. Medical documentation: Part of the solution, or part of the problem? A narrative review of the literature on the time spend on and value of medical documentation. *International Journal of Medical Informatics*, 84(4), pp.221-8.

Cohen, H.J., Feussner, J.R., Weinberger, M., Carnes, M., Hamdy, R.C., Hsieh, F., Phibbs, C., Courtney, D., Lyles, K.W., May, C., McMurtry, C., Pennypacker, L., Smith, D.M., Ainslie, N., Hornick, T., Brodtkin, K. and Lavori, P., 2002. A controlled trial of inpatient and outpatient geriatric evaluation and management. *New England Journal of Medicine*, 346(12), pp.905-12.

Coiera, E.W., Jayasuriya, R.A., Hardy, J., Bannan, A. and Thorpe, M.E.C., 2002. Communication loads on clinical staff in the emergency department. *The Medical Journal of Australia*, 176(6), pp.415-8.

Colaizzi, P.E., 1978. Psychological research as the phenomenologist views it. In: R.S. Valle and M. King, eds. 1978. *Existential-phenomenological alternatives for psychology*. Oxford: Oxford University Press.

Cole, M.G., 1991. Effectiveness of three types of geriatric medical services: lessons for geriatric psychiatric services. *Canadian Medical Association Journal*, 144(10), pp.1229-40.

Collard, A.F., Bachman, S.S. and Beatrice, D.F., 1985. Acute care delivery for the geriatric patient: an innovative approach. *Quality Review Bulletin*, 11(6), pp.180-5.

Comte A., 1970. *Introduction to positive philosophy*. Reprint 1988. Indianapolis: Hackett Pub Co Inc.

Comte A., 1976. *The foundation of sociology*. Edinburgh: Thomas Nelson and Sons.

Conn, J., 2015. Nurses turn to speech-recognition software to speed documentation. *Modern Healthcare*, 45(50), pp.22-3.

Conroy, S.P., Ansari, K., Williams, M., Laithwaite, E., Teasdale, B., Dawson, J., Mason, S. and Banerjee, J., 2014. A controlled evaluation of comprehensive geriatric assessment in the emergency department: the 'Emergency Frailty Unit'. *Age and Ageing*, 43(1), pp.109-14.

Copernicus, N., 1543. *De revolutionibus orbium coelestium; Copernicus: On the Revolutions of the Heavenly Spheres*. Translated from Latin by A.M. Duncan, 1999. Connecticut: Easton.

Corbin, J. and Strauss, A., 2008. *Basics of Qualitative Research; Techniques and procedures for developing Grounded Theory*. 3<sup>th</sup> ed. Thousand Oaks, CA: SAGE Publishing.

Corbin, J. and Strauss, A., 2015. *Basics of Qualitative Research; Techniques and procedures for developing Grounded Theory*. 4<sup>th</sup> ed. Thousand Oaks, CA: SAGE Publishing.

Cordato, N.J., Saha, S. and Price, M.A., 2005. Geriatric interventions: the evidence base for comprehensive health care services for older people. *Australian Health Review*, 29(2), pp.151-5.

Cornwell, J., Levenson, R., Sonola, L. and Poteliakhoff, E., 2012. *Continuity of care for older hospital patients. A call for action*. [pdf] London: The King's Fund. Available at: [https://www.kingsfund.org.uk/sites/files/kf/field/field\\_publication\\_file/continuity-of-care-for-older-hospital-patients-mar-2012.pdf](https://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/continuity-of-care-for-older-hospital-patients-mar-2012.pdf) [Accessed 2 February 2017].

Counsell, S.R., Holder, C.M., Liebenauer, L.L., Palmer, R.M., Fortinsky, R.H., Kresevic, D.M., Quinn, L.M., Allen, K.R., Covinsky, K.E. and Landefeld, C.S., 2000. Effects of a multicomponent intervention on functional outcomes and process of care in hospitalized older patients: a randomized controlled trial of Acute Care for Elders (ACE) in a community hospital. *Journal of the American Geriatrics Society*, 48(12), pp.1572-81.

Cowden, T., Cummings, G. and Profetto-McGrath, J., 2011. Leadership practices and staff nurses' intent to stay: a systematic review. *Journal of Nursing Management*, 19(4), pp.461-77.



Coyne, I., 1997. Sampling in qualitative research. Purposeful and theoretical sampling: merging or clear boundaries? *Journal of Advanced Nursing Practice*, 26(3), pp.623-30.

Creswell, J.W., 2007. *Qualitative inquiry and research design, choosing among five approaches*. 2<sup>nd</sup> ed. Thousand Oaks, CA: SAGE Publishing.

Creswell, J.W., 2013. *Qualitative inquiry and research design, choosing among five approaches*. 3<sup>rd</sup> ed. Thousand Oaks, CA: SAGE Publishing.

Crotty, M., 1996. *Phenomenology and Nursing Research*. Melbourne: Churchill Livingstone.

Dale, W., Hemmerich, J., Kamm, A., Posner, M.C., Matthews, J.B., Rithman, R., Palakodeti, A. and Roggin, K.K., 2014. Geriatric assessment improves prediction of surgical outcomes in older adults undergoing pancreaticoduodenectomy: a prospective study. *Annals of Surgery*, 259(5), pp.960-5.

Damalis, A.M., 2012. *Does a Grounded Theory dissociated from the epistemological bases make sense? The example of Charmaz's Constructivist Grounded Theory*. Munich: GRIN Verlag.

Darmstadter, H., 2016. Relativism defended. *Cogent Arts & Humanities*, 3(1), pp.1-11. doi: 10.1080/23311983.2016.1166685

Data Protection Act 1998. (c.29). London: HMSO.

Day, P. and Rasmussen, P., 2004. What is the evidence for the effectiveness of specialist geriatric services in acute, post-acute and sub-acute settings? A critical appraisal of the literature Christchurch: New Zealand Health Technology Assessment (NZHTA), 149.

Deber, R., Kraetschmer, N., Urowitz, S. and Sharpe, N., 2007. Do people want to be autonomous patients? Preferred roles in treatment decision-making in several patient populations. *Health Expectations: An International Journal of Public Participation in Health Care and Health Policy*, 10(3), pp.248-58.

De Meester, K., Verspuy, M., Monsieurs, K.G. and Van Bogaert, P., 2013. Clinical paper: SBAR improves nurse-physician communication and reduces unexpected death: a pre and post intervention study. *Resuscitation*, 84(9), pp.1192-6.

Denham, M.J., 2004. *The history of geriatric medicine and hospital care of the elderly in England between 1929 and the 1970s*. PhD. University College, London.

Denzin, N.K. and Lincoln, Y.S., 2005. *The SAGE Handbook of qualitative research*. 3<sup>rd</sup> ed. Thousand Oaks, CA: SAGE Publishing.

Denzin, N.K., 2007. Grounded theory and the politics of interpretation. In: A. Bryant and K. Charmaz, eds. 2007. *The SAGE Handbook of Grounded Theory*. Thousand Oaks, CA: SAGE Publishing. pp.454-71.

Department of Health, 2001. *Modern Standards and Service Models, Older People, National Service Framework for Older People*. [pdf] London: Department of Health.

Available at:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/198033/National\\_Service\\_Framework\\_for\\_Older\\_People.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/198033/National_Service_Framework_for_Older_People.pdf) [Accessed 1 February 2017].

Department of Health, 2009. *Inspiring leaders: leadership for quality*. [pdf] London: Department of Health. Available at:

[https://eoeleadership.hee.nhs.uk/sites/default/files/1234220929\\_NbJb\\_inspiring\\_leaders\\_-\\_leadership\\_for\\_quality.pdf](https://eoeleadership.hee.nhs.uk/sites/default/files/1234220929_NbJb_inspiring_leaders_-_leadership_for_quality.pdf) [Accessed 2 February 2017].

Department of Health, 2010. *Average daily number of available beds, by sector, England, 1987–88 to 2009–10*. [pdf] London: Department of Health. Available at:

[www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/@ps/@sta/@perf/documents/digitalasset/dh\\_133690.xls](http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/@sta/@perf/documents/digitalasset/dh_133690.xls) [Accessed 9 March 2017].

Department of Health, 2015a. *Creating a modern nursing workforce. Health Minister Ben Gummer writes about nursing education reform and a new route into nursing*. [online]

London: King's Fund. Available at: <https://www.gov.uk/government/speeches/making-healthcare-more-human-centred-and-not-system-centred> [Accessed 28 January 2017].

Department of Health, 2015b. *Speech: Making healthcare more human-centred and not system-centred. Health Secretary Jeremy Hunt sent out the direction of reform for the future NHS*. [online] London: King's Fund, London. Available at:

<https://www.gov.uk/government/speeches/making-healthcare-more-human-centred-and-not-system-centred> [Accessed 2 February 2017].

De Rui, M., Veronese, N., Manzato, E. and Sergi, G., 2012. Role of comprehensive geriatric assessment in the management of osteoporotic hip fracture in the elderly: an overview. *Disability and Rehabilitation*, 35(9), pp.758-65.

Descartes, R., 1637. *Meditations on first philosophy*. Translated from Latin by J. Cottingham, 2017, 2<sup>nd</sup> ed. London: Cambridge University Press.

Deschodt, M., Flamaing, J., Haentjens, P., Boonen, S. and Milisen, K., 2013. Impact of geriatric consultation teams on clinical outcome in acute hospitals: a systematic review and meta-analysis. *BMC Medicine*, 11, 48. doi: 10.1186/1741-7015-11-48.

Deschodt, M., Claes, V., Van Grootven, B., Van Den Heede, Flamaing, J., Boland, B. and Milisen, K., 2016. Structure and processes of interdisciplinary geriatric consultation teams in acute care hospitals: A scoping review. *International Journal of Nursing Studies*, 55, pp.98-114.

Devor, M., Wang, A., Renvall, M., Feigal, D. and Ramsdell, J., 1994. Compliance with social and safety recommendations in an outpatient comprehensive geriatric assessment program. *Journal of Gerontology*, 49(4), M168-73.

Devriendt, E., Wellens, N.I., Flamaing, J., Declercq, A., Moons, P., Boonen, S. and Milisen, K., 2013. The interRAI Acute Care instrument incorporated in an eHealth system for standardized and web-based geriatric assessment: strengths, weaknesses, opportunities and threats in the acute hospital setting. *BMC Geriatrics*, 13, 90. doi: 10.1186/1471-2318-13-90.

DeWalt, K.M. and DeWalt, B.R., 2011. *Participant observation: a guide for fieldworkers*. Maryland: AltaMira Press.

Dewey, J., 1929. *The Later Works of John Dewey, Volume 4, 1925 - 1953: 1929: The Quest for Certainty (Collected Works of John Dewey)*. Reprint 2008. Southern Illinois: University Press.

Dewey, J., 1931. The development of American Pragmatism. In: H.S. Thayer, ed. *Pragmatism the classic writings*. 1982. Indianapolis: Hackett Publishing Company, pp.23-40.

Dewing, J., 2008. Personhood and dementia: revisiting Tom Kitwood's ideas. *International Journal of Older People Nursing*, 3(1), pp.3-13.

Dey, I., 1993. *Qualitative data analysis: A user-friendly guide for social scientists*. New York: Routledge.

Dey, I., 2007. Grounding categories. In: A. Bryant and K. Charmaz, eds. 2007. *The SAGE Handbook of Grounded Theory*. Thousand Oaks, CA: SAGE Publishing. pp.167-90.

Dicenso, A., Ciliska, D. and Guyatt, G., 2005. Introduction to evidence-based nursing. In: A. Dicenso, G. Guyatt, and D. Ciliska, eds. 2005. *Evidence-Based Nursing: A guide to Clinical Practice*. London: Mosby. pp.9-15.

Diekelmann, N., Allen, D. and Tanner, C.A., 1989. *The NLN criteria for appraisal of baccalaureate programs*. New York: National League of Nursing.

Dijkers, M.P., Murphy, S.L. and Krellman, J., 2012. Evidence-based practice for rehabilitation professionals: concepts and controversies. *Archives of Physical Medicine and Rehabilitation*, 93(8 Suppl), pp.S164-76.

Dow, B., Haralambous, B., Bremnerand, F. and Fearn, M., 2006. *What is person-centred health care? A literature review*. [pdf] Melbourne: Victorian Government Department of Human Services. Available at: [https://www2.health.vic.gov.au/getfile//?sc\\_itemid=%7bCC68AD22-6F31-42BE-87FA-287ACB0335FF%7d](https://www2.health.vic.gov.au/getfile//?sc_itemid=%7bCC68AD22-6F31-42BE-87FA-287ACB0335FF%7d) [Accessed 5 February 2017].

Dowling, M., 2007. From Husserl to Van Manen. A review of different phenomenological approaches. *International Journal of Nursing Studies*, 44(1), pp.131-42.

Drame, M., Lang, P.O., Novella, J.L., Narbey, D., Mahmoudi, R., Laniece, I., Somme, D., Gauvain, J. B., Heitz, D., Voisin, T., De Wazieres, B., Gonthier, R., Ankri, J., Saint-Jean, O., Jeandel, C., Couturier, P., Blanchard, F. and Jolly, D., 2012. Six-month outcome of elderly people hospitalized via the emergency department: the SAFES cohort. *Revue d'Epidemiologie et de Sante Publique*, 60(3), pp.189-96.

Dunn, P., McKenna, H. and Murray, R., 2016. *Deficits in the NHS 2016*. [pdf] London: The King's Fund. Available at: [https://www.kingsfund.org.uk/sites/files/kf/field/field\\_publication\\_file/Deficits in the NHS Kings Fund July 2016 1.pdf](https://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/Deficits_in_the_NHS_Kings_Fund_July_2016_1.pdf) [Accessed 2 February 2017].

Dunne, C., 2011. The place of the literature review in grounded theory research. *International Journal of Social Research Methodology*, 14(2), pp.111-24.

Ebright, P.R., Patterson, E.S., Chalko, B.A. and Render, M.L., 2003. Understanding the complexity of registered nurse work in acute care setting. *The Journal of Nursing Administration*, 33(12), pp.630-8.

Ebright, P.R., 2010. The complex work of RNs: implications for health work environments. *The Online Journal of Issues in Nursing*, 15 (1). doi: 10.3912/OJIN.Vol15No01Man04.

Edwards, A. and Elwyn, G., 2009a. Shared decision-making in health care: Achieving evidence-based patient choice. In: A. Edwards and G. Elwyn, eds. 2009. *Shared Decision-Making in Health Care, achieving evidence-based patient choice*. 2<sup>nd</sup> ed. Oxford: University Press. pp.3-10.

Edwards, A. and Elwyn, G., eds. 2009b. *Shared Decision-Making in Health Care, achieving evidence-based patient choice*. 2<sup>nd</sup> ed. Oxford: University Press.

Ehrlich, C., Kendall, E. and St John, W. 2013. How does care coordination provided by registered nurses “fit” within the organisational processes and professional relationships in the general practice context? *Collegian: The Australian Journal of Nursing Practice, Scholarship & Research*, 20(3), pp.127-35.

Ekdahl, A.W., Sjöstrand, F., Ehrenberg, A., Oredsson, S., Stavenow, L., Wisten, A., Wårdh, A. & Ivanoff, S.d., 2015. Frailty and comprehensive geriatric assessment organized as CGa-ward or CGA-consult for older adult patients in the acute care setting: A systematic review and meta-analysis. *European Geriatric Medicine*, 6(6), pp.523-40.

Ekman, I., Swedberg, K., Taft, C., Lindseth, A., Norberg, A., Brink, E., Carlsson, J., Dahlin-Ivanoff, S., Johansson, I., Kjellgren, K., Lidén, E., Öhlén, J., Olsson, L., Rosén, H., Rydmark, M. and Sunnerhagen, K.S., 2011. Person-centred care- ready for prime time. *European Journal of Cardiovascular Nursing*, 10(4), pp.248-51.

Ekman, I. Wolf, A., Olsson, L.E., Taft, C., Dudas, K., Schaufelberger, M. and Swedberg, K., 2012. Effects of person-centred care in patients with chronic heart failure: the PCC-HF study. *European Heart Journal*, 33(9), pp.1112-9.

Eldh, A.C., Ekman, I. and Ehnfors, M., 2006. Conditions for patient participation and non-participation in health care. *Nursing Ethics*, 13(5), pp.503-14.

Eldh, A.C., Van der Zijpp, T., McMullan, C., McCormack, B., Seers, K. and Rycroft-Malone, J., 2015. 'I have the world's best job' - staff experience of the advantages of caring for older people. *Scandinavian Journal of Caring Studies*, 30(2), pp.365-73.

Ellis, G. and Langhorne, P., 2004. Comprehensive geriatric assessment for older hospital patients. *British Medical Bulletin*, 71(1), pp.45-59.

Ellis, G., Whitehead, M.A., Robinson, D., O'Neill, D. and Langhorne, P., 2011. Comprehensive geriatric assessment for older adults admitted to hospital: meta-analysis of randomised controlled trials. *British Medical Journal*, 343, d6553. doi: 10.1136/bmj.d6553.

Elsawy, B. and Higgins, K.E., 2011. The geriatric assessment. *American Family Physician*, 83(1), pp.48-56.

European Parliament, 2006. *Decision No 1982/2006/EC of the European Parliament and of the Council of 18 December 2006 concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013). Statements by the Commission*. [online] Brussels: European Parliament. Available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006D1982:EN:NOT> [Accessed 4 April 2016].

Evans, R.L., Connis, R.T., Hendricks, R.D. and Haselkorn, J.K., 1995. Multidisciplinary rehabilitation versus medical care: a meta-analysis. *Social Science & Medicine*, 40(12), pp.1699-706.

Evans, S., Gately, C., Huxley, P., Smith, A. and Banerjee, S., 2005. Assessment of quality of life in later life: development and validation of the QuILL. *Quality of Life Research*, 14(5), pp.1291-300.

Evidence-Based Medicine Working Group, 1992. Evidence-based medicine. A new approach to teaching the practice of medicine. *Journal of the American Medical Association (JAMA)*, 268(17), pp.2420-5.

Fealy, G., McCarron, M., O'Neill, D., McCallion, P., Clarke, M., Small, V., O'Driscoll, A. and Cullen, A., 2009. Effectiveness of gerontologically informed nursing assessment and

referral interventions for older persons attending the emergency department: systematic review. *Journal of Advanced Nursing*, 65(5), pp.934-5.

Feinstein, A.R., 1970. The pre-therapeutic classification of co-morbidity in chronic disease. *Journal of Chronic Diseases*, 23(7), pp.455-68.

Feyerabend, P.K., 1981. *Realism, rationalism and scientific method. Philosophical papers, volume 1*. London: Cambridge University Press.

Finucane, M.L., Slovic, P., Hibbard, J.H., Peters, E., Mertz, C.K. and MacGregor, D.G., 2002. Aging and decision-making competence: an analysis of comprehension and consistency skills in older versus younger adults considering health-plan options. *Journal of Behavioral Decision Making*, 15(2), pp.141-64.

Fleck, L. 1935. *The genesis and development of a scientific fact*. Reprint 1979. Chicago: University of Chicago Press.

Foo, C.L., Siu, V.W., Tan, T.L., Ding, Y.Y. and Seow, E., 2012. Geriatric assessment and intervention in an emergency department observation unit reduced re-attendance and hospitalisation rates. *Australasian Journal on Ageing*, 31(1), pp.40-6.

Fossey, E., Harvey, C., McDermott, F. and Davidson, L., 2002. Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*, 36(6), pp.717-32.

Fox, M.T., Persaud, M., Maimets, I., O'Brien, K., Brooks, D., Tregunno, D. and Schraa, E., 2012. Effectiveness of acute geriatric unit care using acute care for elders components: a systematic review and meta-analysis. *Journal of the American Geriatrics Society*, 60(12), pp.2237-45.

Fox, M.T., Sidani, S., Persaud, M., Tregunno, D., Maimets, I., Brooks, D. and O'Brien, K., 2013. Acute care for elders components of acute geriatric unit care: systematic descriptive review. *Journal of the American Geriatrics Society*, 61(6), pp.939-46.

Francis, R., 2013. *Report of the Mid Staffordshire NHS Foundation Trust public inquiry*.

[pdf] London: The Stationary Office. Available at:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/279124/0947.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/279124/0947.pdf) [Accessed 4 February 2017].

Fried, L.P., Tangen, C.M., Walston, J., Newman, A.B., Hirsch, C., Gottdiener, J., Seeman, T., Tracy, R., Kop, W.J., Burke, G., McBurnie, M.A. and Group, C.H.S.C.R., 2001. Frailty in older adults: evidence for a phenotype. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*, 56(3), pp.M146-56.

Fried, L.P., Ferrucci, L., Darer, J., Williamson, J.D. and Anderson, G., 2004. Untangling the concepts of disability, frailty, and comorbidity: implications for improved targeting and care. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*, 59(3), pp.255-63.

Friesen-Storms, J., Bours, G.J.J.W., Van Der Weijden, T. and Beurskens, A.J.H.M., 2014. Shared decision making in evidence-based decisions in chronic care in nursing: a discussion. *International Journal of Nursing Studies*, 52(1), pp.393-402.

Gabbay, J. and Le May, A., 2004. Evidence based guidelines or collectively constructed "mindlines?" Ethnographic study of knowledge management in primary care. *British Medical Journal*, 329(7473), pp.1013. doi: <https://doi.org/10.1136/bmj.329.7473.1013>.

Gadamer, H.G., 2004. *Truth and method*. 2<sup>nd</sup> ed. London: Continuum International Publishing Group.

Galilei, G., 1938. *Dialogues Concerning Two New Sciences*. Translated from Italian and Latin by H. Rew and A. de Salvio, 1914. London: Macmillan.

Gallagher, S.M., 1998. Paternalism in healthcare decision making. *Ostomy/ Wound Management*, 44(4), pp.22, 24-5.

General Medical Council, 2009. Tomorrow's doctors, outcomes and standards for undergraduate medical education. [pdf] Manchester: General Medical Council. Available at: < [http://www.gmc-uk.org/Tomorrow\\_s\\_Doctors\\_1214.pdf](http://www.gmc-uk.org/Tomorrow_s_Doctors_1214.pdf) 48905759.pdf> [Accessed 15 April 2013].

General Medical Council, 2014. *Good Medical Practice (2013)*. [online] London: General Medical Council. Available at: [http://www.gmc-uk.org/guidance/good\\_medical\\_practice.asp](http://www.gmc-uk.org/guidance/good_medical_practice.asp) [Accessed 9 January 2017].

Giddings, L.S. and Grant, B.M., 2007. A Trojan Horse for positivism? A critique of mixed methods research. *Advances in Nursing Science*, 30(1), pp.52-60.



Giles, T.M., De Lacey, S. and Muir-Cochrane, E., 2016. Coding, constant comparisons, and core categories; a worked example for novice Constructivist Grounded Theorists. *Advances in Nursing Science*, 39(1), pp.E29-E44. doi: 10.1097/ANS.000000000000109.

Giorgi, A. 1985. *Phenomenology and Psychological Research*. Pittsburgh: Duquesne University Press.

Giorgi, A., 1997. The theory, practice, and evaluation of the phenomenological method as a qualitative research procedure. *Journal of Phenomenological Psychology*, 28(2), pp.235-60.

Giorgi, A., 2000. Concerning the application of phenomenology to caring research. *Scandinavian Journal of Caring Science*, 14(1), pp.11-5.

Gladman, J.R.F., Conroy, S.P., Ranhoff, A.H. and Gordon, A.L., 2016. New horizons in the implementation and research of comprehensive geriatric assessment: knowing, doing and the 'know-do' gap. *Age and Ageing*, 45(2), pp.194-200.

Glaser, B.G. and Strauss A.L., 1965. *Awareness of Dying*. Chicago: Aldine Publishing Company.

Glaser, B.G. and Strauss, A.L., 1967. *The discovery of grounded theory*. Chicago: Aldine.

Glaser, B.G., 1978. *Theoretical sensitivity: Advances in methodology of Grounded Theory*. Mill Valley, CA: Sociology Press.

Glaser, B.G., 1992. *Basics of Grounded Theory Analysis*. Mill Valley, CA: Sociology Press.

Glaser, B.G., 2002. Constructivist grounded theory? *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 3(3), Art. 12,. Available at: <http://www.qualitative-research.net/index.php/fqs/article/view/825/1793> [Accessed 4 February 2017].

Glaser, B.G., with the assistance of Holton, J., 2004. Remodeling Grounded Theory. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 5(2), Art. 4. Available at: <http://nbn-resolving.de/urn:nbn:de:0114-fqs040245> [Accessed 4 February 2017].

Glaser, B.G., 2007. Doing formal theory. In: A. Bryant and K. Charmaz, eds. 2007. *The SAGE Handbook of Grounded Theory*. Thousand Oaks, CA: SAGE Publishing. pp.97-113.

- Gold, R.L., 1958. Roles in sociological field observations. *Social Forces*, 36(3), pp.217-223.
- Goldberg, S.E., Cooper, J., Blundell, A., Gordon, A.L., Masud, T. And Moorchilot, R., 2016. Development of a curriculum for advanced nurse practitioners working with older people with frailty in the acute hospital through a modified Delphi process. *Age and Ageing*, 45(1), pp.48-53.
- Goodman, B., 2015. Why do nurses behave as they do? *Blog*, [blog] . February 2015. Available at: <http://www.bennygoodman.co.uk/why-do-nurses-behave-as-they-do/> [Accessed 13th January 2017].
- Graf, C.E., Zekry, D., Giannelli, S., Michel, J.P. and Chevalley, T., 2011. Efficiency and applicability of comprehensive geriatric assessment in the emergency department: a systematic review. *Aging: Clinical and Experimental Research*, 23(4), pp.244-54.
- Gray, L.C., Bernabei, R., Berg, K., Finne-Soveri, H., Fries, B.E., Hirdes, J.P., Jonsson, P.V., Morris, J.N., Steel, K. and Arino-Blasco, S., 2008. Standardizing assessment of elderly people in acute care: the interRAI Acute Care instrument. *Journal of the American Geriatrics Society*, 56(3), pp.536-41.
- Gray, L.C., Berg, K., Fries, B.E., Henrard, J.C., Hirdes, J.P., Steel, K. and Morris, J.N., 2009. Sharing clinical information across care settings: the birth of an integrated assessment system. *BMC Health Service Research*, 9:71. doi: 10.1186/1472-6963-9-71.
- Greenhalgh, T., Howick, J. and Maskrey, N., 2014. Evidence based medicine: a movement in crisis? *British Medical Journal*, 348, g3725. doi: 10.1136/bmj.g3725.
- Guba, E.G. and Lincoln, Y.S., 1989. *Fourth generation evaluation*. Thousand Oaks, CA: SAGE Publishing.
- Guba, E.G. and Lincoln, Y.S., 1994. Competing paradigms in qualitative research. In: N.K. DENZIN and Y.S. LINCOLN, eds. 1994. *Handbook of qualitative research*. Thousand Oaks, CA: SAGE Publishing. pp.105-17.
- Hamaker, M.E., Prins, M.C. and Stauder, R., 2014. The relevance of a geriatric assessment for elderly patients with a haematology malignancy- a systematic review. *Leukemia Research*, 38(3), pp.275-83.

Hammersley, M., 1989. *The dilemma of the qualitative method: Herbert Blumer and the Chicago tradition*. London: Routledge.

HarperCollins, 2017. *Collins English Dictionary*. [online] Glasgow: HarperCollins. Available at: <https://www.collinsdictionary.com/> [Accessed 2 February 2017].

Harris, M., 1968. *The rise of the anthropological theory: A history of theories of culture*. New York: T.Y. Crowell.

Harris, R.D., Chalmers, J.P., Henschke, P.J., Tonkin, A., Popplewell, P.Y., Stewart, A.M., Radford, A.J., O'Brien, K.P., Bond, M.J., Harris, M.G., Turnbull, R.J., Champion, G., Hobbin, E.R., and Andrews, G.R., 1991. A randomised study of outcomes in a defined group of acutely ill elderly patients managed in a geriatric assessment unit or a general medical unit. *Internal Medicine Journal*, 21(2), pp.230-4.

Harris, R., Wilson-Barnett, J., Griffiths, P. and Evans, A., 1998. Patient assessment: validation of a nursing instrument. *International Journal of Nursing Studies*, 35(6), pp.303-13.

Harris, R. and Dyson, E., 2001. Recruitment of frail older people to research: lessons learnt through experience. *Journal of Advanced Nursing*, 36(5), pp.643-51.

Harris, R., Sims, S., Hewitt, G., Joy, M., Brearley, S., Cloud, G., Drennan, V., Greenwood, N., Jones, F., Kalra, L., Mackenzie, A. and Ross F., 2013. *Interprofessional teamwork across stroke care pathways: Outcomes and patient and carer experience. Final report*. [pdf] London: National Institute for Health Research Service Delivery and Organisation Programme. Available at: [http://www.netscc.ac.uk/netscc/hsdr/files/project/SDO\\_FR\\_08-1819-219\\_V01.pdf](http://www.netscc.ac.uk/netscc/hsdr/files/project/SDO_FR_08-1819-219_V01.pdf) [Accessed 10 February 2017].

Hart, C., 2015. The elephant in the room: Nursing and nursing power on an interprofessional team. *Journal of Continuing Education in Nursing*, 46(8), pp.349-55

Heidegger, M. 1927. *Being and time*. Translated from German by J Macquarrie and E. Robinson, 1962. Oxford: Blackwell Publishing Ltd.

Heidegger, M., 1975. *The basic problems of phenomenology*. Translated from German by A. Hofstadter, 1988. Bloomington: Indiana University Press.

- Henderson, V.A., 1991. *The nature of nursing: Reflections after 25 years*. New York: National League for Nursing.
- Hendry, C. and Walker, A., 2004. Priority setting in clinical nursing practice: literature review. *Journal of Advanced Nursing*, 47(4), pp.427-36.
- Hesse, M., 1980. *Revolutions and reconstructions in the philosophy of science*. Brighton: Harvester.
- Hewitt, G., Sims, S. and Harris, R., 2014. Using realist synthesis to understand the mechanisms of interprofessional teamwork in health and social care. *Journal of Interprofessional Care*, 28(6), pp.501-6.
- Hewitt, G., Sims, S., Greenwood, N., Jones, F., Ross, F. Harris, R., 2015. Interprofessional teamwork in stroke care: is it visible or important to patients and carers? *Journal of Interprofessional Care*, 29(4), pp.331-9.
- Hewitt, G., Sims, S. and Harris, R., 2015. Evidence of communication, influence and behavioural norms in interprofessional teams: A realist synthesis. *Journal of Interprofessional Care*, 29(2), pp.100-5.
- Hickman, L., Newton, P., Halcomb, E.J., Chang, E. and Davidson, P., 2007. Best practice interventions to improve the management of older people in acute care settings: a literature review. *Journal of Advanced Nursing*, 60(2), pp.113-26.
- Hickman, L.D., Phillips, J.L., Newton, P.J., Halcomb, E.J., Al Abed, N. and Davidson, P.M., 2015. Multidisciplinary team interventions to optimise health outcomes for older people in acute care settings: A systematic review. *Archives of Gerontology and Geriatrics*, 61(3), pp.322-9.
- Holloway, I. and Wheeler, S., 2002. *Qualitative research in nursing*. 2<sup>nd</sup> ed. San Francisco: Wiley-Blackwell.
- Holm, A.L., Berland, A.K. and Severinsson, E. 2016. Older patients' involvement in shared decision-making- a systematic review. *Open Journal of Nursing*, 6(3), pp.170-85.
- Hosseinpour, A.R., Stewart Williams, J.A., Jan, B., Kowal, P., Officer, A., Posarac, A. and Chatterji, S. 2012. Social determinants of sex differences in disability among older adults:

a multi-country decomposition analysis using the World Health Survey. *International Journal for Equity in Health*, 11; 52. doi: 10.1186/1475-9276-11-52.

Hripcsak, G., Vawdrey, D.K., Fred, M.R. and Bostwick, S.B., 2011. Use of electronic clinical documentation: time spent and team interactions. *Journal of the American Medical Informatics Association*, 18(2), pp.112-7.

Hume, D., 1738. *A treatise of human nature*. Reprint 2004. New York: Dover Publications Inc.

Humphries, R., Thorlby, R., Holder, H., Hall, P. and Charles, A., 2016. *Social the care of older people, home truths*. [pdf] London: The King's Fund. Available at: [https://www.kingsfund.org.uk/sites/files/kf/field/field\\_publication\\_file/Social\\_care\\_older\\_people\\_Kings\\_Fund\\_Sep\\_2016.pdf](https://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/Social_care_older_people_Kings_Fund_Sep_2016.pdf) [Accessed 4 February 2017].

Husserl, E., 1931. *Ideas, general introduction to pure phenomenology*. Translated from German by W.R.B. Gibson., 2002. London: Routledge.

Iles, V., 2011. *Why reforming the NHS doesn't work. The importance of understanding how good people offer bad care*. [pdf] Available at: [http://www.reallylearning.com/Free\\_Resources/MakingStrategyWork/reforming.pdf](http://www.reallylearning.com/Free_Resources/MakingStrategyWork/reforming.pdf) [Accessed 5 February 2017].

Imison, C., Poteliakhoff, E. and Thompson, J., 2012. *Older people and emergency bed use. Exploring variation*. [pdf] London: The King's Fund. Available at: [https://www.kingsfund.org.uk/sites/files/kf/field/field\\_publication\\_file/older-people-and-emergency-bed-use-aug-2012.pdf](https://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/older-people-and-emergency-bed-use-aug-2012.pdf) [Accessed 9 March 2017].

Indrakusuma, R., Dunker, M.S., Peetoom, J.J. and Schreurs, W.H., 2014. Evaluation of preoperative geriatric assessment of elderly patients with colorectal carcinoma. A retrospective study. *European Journal of Surgical Oncology*, 41(1), pp.21-7.

Inouye, S.K., Bogardus, S.T., Baker, D.I., Leo-Summers, L. and Cooney, L.M., 2000. The Hospital Elder Life Program: a model of care to prevent cognitive and functional decline in older hospitalized patients. Hospital Elder Life Program. *Journal of the American Geriatrics Society*, 48(12), pp.1697-706.

Janns, R., Rispens, S., Segers, M. and Jehn, K.A., 2012. What is happening under the surface? Power, conflict and the performance of medical teams. *Medical Education*, 46(9), pp.838-49.

Jayadevappa, R., Bloom, B.S., Raziano, D.B. and Lavizzo-Mourey, R., 2003. Dissemination and characteristics of acute care for elders (ACE) units in the United States. *International Journal of Technology Assessment in Health Care*, 19(1), pp.220-7.

Joint Royal Colleges of Physicians Training Board, 2016. *Specialty training curriculum for geriatric medicine curriculum*. [pdf] London: Joint Royal Colleges of Physicians Training Board. Available at: [http://www.gmc-uk.org/2010\\_Geriatric\\_Medicine\\_Curriculum\\_AMENDMENTS\\_2016\\_040117.pdf](http://www.gmc-uk.org/2010_Geriatric_Medicine_Curriculum_AMENDMENTS_2016_040117.pdf) 69142317.pdf [Accessed 8 March 2017].

Jones, D.M., Song, X. and Rockwood, K., 2004. Operationalizing a frailty index from a standardized comprehensive geriatric assessment. *Journal of the American Geriatrics Society*, 52(11), pp.1929-33.

Jones, T.L., Hamilton, P. and Murry, N., 2015. Unfinished nursing care, missed care, and implicitly rationed care: State of the science review. *International Journal of Nursing Studies*, 52(6), pp.1121-37.

Jones, T.L., 2016. What nurses do during time scarcity- and why. *The Journal of Nursing Administration*, 46(9), pp.449-54.

Joseph-Williams, N., Elwyn, G. and Edwards, A., 2013. Knowledge is not power for patients: A systematic review and thematic synthesis of patient-reported barriers and facilitators to shared decision making. *Patient Education and Counseling*, 94(3), pp.291-309.

Kamel, S.J., Jarrett, P. and MacDonald, E., 2005. Effectiveness of geriatric evaluation and management units in caring for older adults. *Geriatrics Today: Journal of the Canadian Geriatrics Society*, 8(3), pp.104-9.

Kane, R.L., 2002. The future history of geriatrics: geriatrics at the crossroads. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*, 57(12), pp.M803-5.

Kant, I., 1781. *Critique of pure reason*. Translated from German by N.K. SMITH., 1929. London: Macmillan.

Kant, I., 1785. *Foundation of the metaphysics of morals*. Translated from German by L. White Beck, 2<sup>nd</sup> ed, 1989. London: Pearson.

Kessler, I., Heron, P. and Dopson, S., 2015. Professionalization and expertise in care work: The hoarding and discarding of tasks in nursing. *Human Resource Management*, 54(5), pp.737-52.

King, N. and Horrocks, C., 2010. *Interviews in qualitative research*. Thousand Oaks, CA: SAGE Publishing.

Kite, M.E. and Smith-Wagner, 2002. Attitudes toward older adults. In: T.D. Nelson, ed. 2002. *Ageism: Stereotyping and prejudice against older persons*. Cambridge: The MIT Press. pp.129-62.

Kitson, A.L., Muntlin Athlin, A. and Conroy, T., 2014. Anything but basic: Nursing's challenge in meeting patients' fundamental care needs. *The Journal of Nursing Scholarship*, 46(5), pp.331-9.

Kitwood, T. and Bredin, K., 1992. Towards a theory of dementia care: personhood and well-being. *Ageing and Society*, 12(3), pp.269-87.

Kitwood, T., 1997. *Dementia considered: the person comes first*. Buckingham: Open University Press.

Körner, M., Bütof, S., Müller, C., Zimmerman, L., Becker, S. and Bengel, J., 2016. Interprofessional teamwork and team interventions in chronic care: A systematic review. *Journal of Interprofessional Care*, 30(1), pp.15-28.

Kosse, N.M., Dutmer, A.L., Dasenbrock, L., Bauer, J.M. and Lamoth, C.J.C., 2013. Effectiveness and feasibility of early physical rehabilitation programs for geriatric hospitalized patients: a systematic review. *BMC Geriatrics*, 13: 107. doi: 10.1186/1471-2318-13-107.

Kralik, D. and Van Loon, A., 2008. Feminist research. In: R. WATSON, ed. 2008. *Nursing research: design and methods*. New York: Elsevier. pp.35-43.

- Kroeber, A.L. and Kluckhohn, C., 1952. Culture: A critical review of concepts and definitions. *Peabody Museum of American Archaeology and Ethnology, Harvard University*, 47(1), vii, 223.
- Kuhn, T.S., 1970. Logic of Discovery or Psychology of Research. In: I. LAKATOS and A. MUSGRAVE, eds. 1970. *Criticism and the Growth of Knowledge*. London: Cambridge University Press. pp.1-24.
- Kuhn, T.S., 2012. *The Structure of Scientific Revolutions: 50<sup>th</sup> anniversary edition*. 4<sup>rd</sup> ed. Chicago: University of Chicago Press.
- Kydd, A., Wild D. and Nelson, S., 2013. Attitudes towards caring for older people: findings and recommendations for practice. *Nursing Older People*, 25(4), pp.21-8.
- Lancaster, G., Kolakowsky-Hayner, S., Kovacich, J. and Greer-Williams, N., 2015. Interdisciplinary communication and collaboration among physicians, nurses, and unlicensed assistive personal. *Journal of Nursing Scholarship*, 47(3), pp.275-84.
- Landefeld, C.S., Palmer, R.M., Kresevic, D.M., Fortinsky, R.H. and Kowal, J., 1995. A randomized trial of care in a hospital medical unit especially designed to improve the functional outcomes of acutely ill older patients. *New England Journal of Medicine*, 332(20), pp.1338-44.
- Lang, P.O., Michel, J.P. and Zekry, D., 2009. Frailty syndrome: a transitional state in a dynamic process. *Gerontology*, 55(5), pp.539-49.
- Land, V., Parry, R. and Seymour, J., 2017. Communication practices that encourage and constrain shared decision making in health-care encounters: systematic review of conversation analytic research. *Health Expectations: An International Journal of Public Participation in Health Care and Health Policy*, doi: 10.1111/hex.12557. [Epub ahead of print].
- Langdon, R., Johnson, M., Carroll, V. and Antonio, G., 2013. Assessment of the elderly: it's worth covering the risks. *Journal of Nursing Management*, 21(1), pp.94-105.
- Lavander, P., Meriläinen, M. and Turkki, L., 2016. Working time use and division of labour amongst nurses and health-care workers in hospital – a systematic review. *Journal of Nursing Management*, 24(8), pp.1027-40.



- Lawrence, N. and Richardson, J., 2012. To explore and understand the leadership experience of modern matrons, within an acute NHS Trust. *Journal of Nursing Management*, 22(1), pp.70-9.
- Leduc, N., Tannenbaum, T.N., Bergman, H., Champagne, F., Clarfield, A.M. and Kogan, S., 1998. Compliance of frail elderly with health services prescribed at discharge from an acute-care geriatric ward. *Medical Care*, 36(6), pp.904-14.
- Légaré, F., Ratté, S., Gravel, K. and Graham, I.D., 2008. Barriers and facilitators to implementing shared decision-making in clinical practice: Update of a systematic review of health professionals' perceptions. *Patient Education and Counseling*, 73(3), pp.526-35.
- Lempert, L.B., 2007. Asking questions of the data: memo writing in the grounded theory tradition. In: A. Bryant and K. Charmaz, eds. 2007. *The SAGE Handbook of Grounded Theory*. Thousand Oaks, CA: SAGE Publishing. pp.245-64.
- Leplege, A., Gzil, F., Cammelli, M., Lefevre, C., Pachoud, B. and Ville, I., 2007. Person-centredness: conceptual and historical perspectives. *Disability and Rehabilitation*, 29(2-21), pp.1555-65.
- Levinson, W., Kao, A., Kuby, A. and Thisted, R.A., 2005. Not all patients want to participate in decision making. A national study of public preferences. *Journal of General Internal Medicine*, 20(6), pp.531-5.
- Lewin, K., 1946. Action research and minority problems. *Journal of Social Issues*, 2(4), pp.34-46.
- Lewin, S. and Reeves, S., 2011. Enacting 'team' and 'collaboration': using Goffman's theory of impression management to illuminate interprofessional practice on hospital wards. *Social Science & Medicine*, 72(10), pp.1595-1602.
- Liaschenko, J. and Fisher, A., 1999. Theorizing the knowledge that nurses use in the conduct of their work. *Scholarly Inquiry for Nursing Practice: An International Journal*, 13(1), pp.29-41.
- Liberati, E.G., Gorli, M. and Scaratti, G., 2016. Invisible walls within multidisciplinary teams: Disciplinary boundaries and their effects on integrated care. *Social Science & Medicine*, 150, pp.31-9.

- Limb, M., 2012. NHS promises to ensure modern leadership style to improve staff morale. *British Medical Journal*, 344, e3746. doi: 10.1136/bmj.e3746.
- Lincoln, Y.S. and Guba, E.G., 1985. *Naturalistic inquiry*. Thousand Oaks, CA: SAGE Publishing.
- Lincoln, Y.S., Lynham, S.A. and Guba, E.G., 2011. Paradigm controversies, contradictions, and emerging confluences, Revisited. In: N.K. DENZIN and Y.S. LINCOLN, eds. 2011. *Handbook of qualitative research*. 4<sup>th</sup> ed. Thousand Oaks, CA: SAGE Publishing. pp. 191–215.
- Linertová, R., García-Pérez, L., Vázquez-Díaz, J.R., Lorenzo-Riera, A. and Sarría-Santamera, A., 2011. Interventions to reduce hospital readmissions in the elderly: in-hospital or home care. A systematic review. *Journal of Evaluation in Clinical Practice*, 17(6), pp.1167-75.
- Liu, Y., While, A.E., Norman, I.J. and Ye, W., 2012. Health professionals' attitudes toward older people and older patients: A systematic review. *Journal of Interprofessional Care*, 26(5), pp.397-409.
- Liu, Y., Norman, I.J. and While, A.E., 2013. Nurses' attitudes towards older people: A systematic review. *International Journal of Nursing Studies*, 50(9), pp.1271-82.
- Locke, J., 1689. *An essay concerning human understanding*. Reprint 1995. New York: Prometheus Books.
- Long, S.J., Brown, K.F., Ames, D. and Vincent, C., 2013. What is known about adverse events in older medical hospital inpatients? A systematic review of the literature. *International Journal for Quality in Health Care*, 25(5), pp.542-54.
- Luk, J.K., Or, K.H. and Woo, J., 2000. Using the comprehensive geriatric assessment technique to assess elderly patients. *Hong Kong Medical Journal*, 6(1), pp.93-8.
- Maben, J., Latter, S. and Clark, J.M., 2007. The sustainability of ideals, values and the nursing mandate: evidence from a longitudinal qualitative study. *Nursing Inquiry*, 14(2), pp.99-113.

Maben, J., 2008. The art of caring: Invisible and subordinated? A response to Juliet Corbin: 'Is caring a lost art in nursing?' *International Journal of Nursing Studies*, 45(3), pp.335-8.

Maben, J. and Griffiths, P., 2008. *Nurses in society: starting the debate*. London: King's College London.

Maben, J., Adams, M., Peccei, R., Murrells, T. and Robert, G., 2012. 'Poppets and parcels': the links between staff experience of work and acutely ill older peoples' experience of hospital care. *International Journal of Older People Nursing*, 7(2), pp.83-94.

Maguire, D., Dunn, P. and McKenna, H., 2016. *How hospital activity in the NHS in England has changed over time*. [online] London: The King's Fund. Available at: <https://www.kingsfund.org.uk/publications/hospital-activity-funding-changes> [Accessed 29 January 2017].

Maisonneuve, J.J., Pulford, C., Lambert, T.W. and Goldacre, M.J., 2014. Career choices for geriatric medicine: national surveys of graduates of 1974-2009 from all UK medical schools. *Age and Ageing*, 43(4), pp.535-41.

Makoul, G. and Clayman, M.L., 2006. An integrative model of shared decision making in medical encounters. *Patient Education and Counseling*, 60(3), pp.301-12.

Maly, R.C., Abrahamse, A.F., Hirsch, S.H., Frank, J.C. and Reuben, D.B., 1996. What influences physician practice behavior? An interview study of physicians who received consultative geriatric assessment recommendations. *Archives of Family Medicine*, 5(8), pp.448-54.

Manthey, M., 1980. *The Practice of Primary Nursing*. Boston: Blackwell Scientific.

MANTRA, 2017. *Research data management training*. [online] Edinburgh: University of Edinburgh. Available at: <http://datalib.edina.ac.uk/mantra/> [Accessed 10 February 2017].

Mantzorou, M. and Mastrogiannis, D., 2011. The value and significance of knowing the patient for professional practice, according to the Carper's patterns of knowing. *Health Science Journal*, 5(4), pp.251-61.

Marengoni, A., Angleman, S., Melis, R., Mangialasche, F., Karp, A., Garmen, A., Meinow, B. and Fratiglioni, L., 2011. Aging with multimorbidity: a systematic review of the literature. *Ageing Research Reviews*, 10(4), pp.430-9.

Marshall, B., Cardon, P., Poddar, A. and Fontenot, R., 2013. Does sample size matter in qualitative research?: A review of qualitative interviews in IS research. *Journal of Computer Information Systems*, 54(1), pp.11-22.

Martin, G.P., Kocman, D., Stephens, T., Peden, C.J. and Pearse, R.M. 2017. Pathways to professionalism? Quality improvement, care pathways, and the interplay of standardisation and clinical autonomy. *Sociology of Health & Illness*, doi: 10.1111/1467-9566.12585. [Epub ahead of print].

Martin, J.S., Ummenhofer, W., Manser, T. and Spirig, R., 2010. Interprofessional collaboration among nurses and physicians: making a difference in patient outcome. *Swiss Medical Weekly*, 140: w13062. doi: 10.4414/smw.2010.13062.

Marx, K. and Engels, F., 1848. *The communist manifesto*. Translated from German by S. Moore and F. Engels, 1888. Reprint 2014. New York: International Publishes Co.

Masters, J., 1995. The history of action research. In: I. Hughes, ed. *Action Research electronic reader*. Sidney: The University of Sidney.

Mata, R., Schooler, L.J. and Rieskamp, J., 2007. The aging decision maker: cognitive aging and the adaptive selection of decision strategies. *Psychology and Aging*, 22(4), pp.796-810.

Matthews, D.A., 1984. Dr. Marjory Warren and the origin of British geriatrics. *Journal of the American Geriatrics Society*, 32(4), pp.253-8.

Mattila, E., Pitkänen, A., Alanen, S., Leino, K., Luojus, K., Rantanen, A. and Aalto, P., 2014. The effects of the primary nursing care model: A systematic review. *Journal of Nursing & Care*, 3:205. doi:10.4172/2167-1168.1000205.

Matziou, V., Vlahioti, E., Perdikaris, P., Matziou, T., Megapanou, E. and Petsios, K., 2014. Physician and nursing perceptions concerning interprofessional communication and collaboration. *Journal of Interprofessional Care*, 28(6), pp.526-33.

- May, K.A., 1994. Abstract Knowing. The Case for Magic in Method. In: J. MORSE, ed. 1994. *Critical Issues in Qualitative Research Methods*. Thousand Oaks, CA: SAGE Publishing. pp.10-22.
- McCallin, A., 2001. Interdisciplinary practice- a matter of collaboration: an integrated literature review. *Journal of Clinical Nursing*, 10(4), pp.419-28.
- McCance, T., McCormack, B. and Dewing, J., 2011. An exploration of person-centredness in practice. *Online Journal of Issues in Nursing*, 16(2), 1.
- McCann, T. and Clark, E., 2003. Grounded theory in nursing research: Part 3 – application. *Nurse Researcher*, 11(2), pp.29-39.
- McCann, T.V., Clark, E. and Lu, S., 2010. Bachelor of Nursing students career choices: A three-year longitudinal study. *Nurse Education Today*, 30 (1), pp.31-6.
- McClane, K.S., 2006. Screening instruments for use in a complete geriatric assessment. *Clinical Nurse Specialist*, 20(4), pp.201-7.
- McCormack, B., Kitson, A., Harvey, G., Rycroft-Malone, J., Titchen, A. and Seers, K., 2001. Getting evidence into practice: the meaning of 'context'. *Journal of Advanced Nursing*, 38(1), pp.94-104.
- McCormack, B., 2003. A conceptual framework for person-centred practice with older people. *International Journal of Nursing Practice*, 9(3), pp.202-9.
- McCormack, B., 2004. Person-centredness in gerontological nursing: an overview of the literature. *Journal of Clinical Nursing*, 13(3a), pp.31-8.
- McCormack, B. and McCance, T., 2006. Development of a framework for person-centred nursing. *Journal of Advanced Nursing*, 56(), pp.472-9.
- McCormack, B., Karlsson, B., Lerdal, A. and Dewing, J., 2010. Exploring person-centredness: a qualitative meta-synthesis of four studies. *Scandinavian Journal of Caring Sciences*, 24(3), pp.620-34.
- McCrae, N. and Purssell, E., 2016. Is it really theoretical? A review of sampling in grounded theory studied in nursing journals. *Journal of Advanced Nursing*, 72(10), pp.2284-93.

- McCusker, J., Verdon, J., VAdeboncoeur, A., Levesque, J.F., Sinha, S.K., Kim, K.Y. and Belzile, E., 2012. The elder-friendly emergency department assessment tool: development of a quality assessment tool for emergency department-based geriatric care. *Journal of the American Geriatrics Society*, 60(8), pp.1534-9.
- McMurray, A. and Cooper, H., 2016. The nurse navigator: An evolving model of care. *Collegian: The Australian Journal of Nursing Practice, Scholarship & Research*, 24(2), pp.205-12.
- Mead, G.H., 1938. History and the experimental methods, essay 6. In: C.W. Morris, J.M. Brewster, A.M. Dunham, and D. Miller, eds. 1938. *The philosophy of the act*. Chicago: University of the Chicago Press. pp.92-100.
- Mental Capacity Act 2005. (c.9). London HMSO.
- Merleau-Ponty, M., 1945. *Phenomenology of perception*. 2nd ed. Translated by C. SMITH., 2002. London: Routledge.
- Merli, F., Luminari, S., Rossi, G., Mammi, C., Marcheselli, L., Ferrari, A., Spina, M., Tucci, A., Stelitano, C., Capodanno, I., Fragasso, A., Baldini, L., Botelli, C., Montechiarello, E., Fogazzi, S., Lamorgese, C., Cavalli, L. And Frederico, M., 2014. Outcome of frail elderly patients with diffuse large B-cell lymphoma prospectively identified by comprehensive geriatric assessment: results from a study of the Fondazione Italiana Linfomi. *Leukemia & Lymphoma*, 55(1), pp.38-43.
- Merriam, S.B., 2009. *Qualitative research, a guide to design and implementation*. San Francisco: John Wiley and Sons Inc.
- Michel, L., Waelli, M., Allen, D. and Minvielle, E., 2017. The content and meaning of administrative work: a qualitative study of nursing practices. *Journal of Advanced Nursing*, doi: 10.1111/jan.13294. [Epub ahead of print].
- Michelet, M., Lund, A. and Sveen, U., 2014. Strategies to recruit and retain older adults in intervention studies: A quantitative comparative study. *Archives of Gerontology and Geriatrics*, 59(1), pp.25-31.
- Morin, T., Laniece, I., Desbois, A., Amiard, S., Gavazzi, G. and Couturier, P., 2012. Evaluation of adherence to recommendations within 3 months after comprehensive

geriatric assessment by an inpatient geriatric consultation team. *Geriatric et Psychologie Neuropsychiatrie du Vieillissement*, 10(3), pp.285-93.

Mortimer, J. and Green, M., 2015. *Briefing: The Health and Care of Older People in England 2015*. [pdf] London: AgeUK. Available at: <http://www.cpa.org.uk/cpa/docs/AgeUK-Briefing-TheHealthandCareofOlderPeopleinEngland-2015.pdf> [Accessed 4 March 2017].

Mounier, E., 1952. *Personalism*. Notre Dame: University of Notre Dame Press.

Mountain, L.A., Campbell, S.E., Seymour, D.G., Primrose, W.R. and Whyte, M.I., 2004. Assessment of individual quality of life using the SEIQoL-DW in older medical patients. *QJM: Monthly Journal of the Association of Physicians*, 97(8), pp.519-24.

Moustakas, C., 1994. *Phenomenological Research Methods*. Thousand Oaks, CA: SAGE Publishing.

Mulhall, A., 2002. In the field: notes on observation in qualitative research. *Journal of Advanced Nursing*, 41(3), pp.306-13.

Murad, M.H., Asi, N., Alsawas, M. and Alahdab, F., 2016. New evidence pyramid. *Evidence-Based Medicine*, 21, pp.125-7.

Nascher, J.L., 1909. Geriatrics. *New York Medical Journal*, 90, pp.358-9.

National Health Service Act 1946. (c.81). London: HMSO.

National Health Service Benchmarking Network, 2017. *Older people's care in acute settings national report*. [pdf] Manchester: Benchmarking Network. Available at: [http://www.bgs.org.uk/pdf/cms/event\\_downloads/0318\\_benchmarking\\_network.pdf](http://www.bgs.org.uk/pdf/cms/event_downloads/0318_benchmarking_network.pdf) [Accessed 21 April 2017].

National Health Service Choices, 2013a. *The history of the NHS in England*. [online] London: Department of Health. Available at: <http://www.nhs.uk/NHSEngland/thenhs/nhshistory/sections/NHShistory1948.aspx> [Accessed 5 February 2017].

National Health Service Choices, 2013b. *The history of the NHS in England*. [online] London: Department of Health. Available at:

<http://www.nhs.uk/NHSEngland/thenhs/about/Pages/nhscoreprinciples.aspx> [Accessed 5 February 2017].

National Health Service England South, 2014. *Safe, compassionate care for frail older people using an integrated care pathway: Practical guidance for commissioners, providers and nursing, medical and allied health professional leaders*. [pdf] Reading: NHS England South. Available at: <https://www.england.nhs.uk/wp-content/uploads/2014/02/safe-comp-care.pdf> [Accessed 5 February 2017].

National Health Service Leadership Academy, 2011. *Clinical leadership competency framework*. [pdf] Coventry: NHS Institute for Innovation and Improvement. Available at: <https://www.leadershipacademy.nhs.uk/wp-content/uploads/2012/11/NHSLeadership-Leadership-Framework-Clinical-Leadership-Competency-Framework-CLCF.pdf> [Accessed 5 February 2017].

National Health Service Leadership Academy, 2014. *Healthcare leadership model, version 1.0*. [pdf] Leeds: NHS Leadership Academy. Available at: [http://www.leadershipacademy.nhs.uk/wp-content/uploads/dlm\\_uploads/2014/10/NHSLeadership-LeadershipModel-colour.pdf](http://www.leadershipacademy.nhs.uk/wp-content/uploads/dlm_uploads/2014/10/NHSLeadership-LeadershipModel-colour.pdf) [Accessed 5 February 2017].

National Health Service Professionals, 2010. *CG2- Record keeping guidelines*. [pdf] Watford: NHS Professionals. Available at: <http://www.nhsprofessionals.nhs.uk/download/comms/cg2%20-%20record%20keeping%20clinical%20guidelines.pdf> [Accessed 5 February 2017].

National Institutes of Health, 2014. *Quality assessment of systematic reviews and meta-analyses*. [online] Washington: U.S. Department of Health & Human Sciences. Available at: [https://www.nhlbi.nih.gov/health-pro/guidelines/in-develop/cardiovascular-risk-reduction/tools/sr\\_ma](https://www.nhlbi.nih.gov/health-pro/guidelines/in-develop/cardiovascular-risk-reduction/tools/sr_ma) [Accessed 24 October 2017].

Negussie, N. and Demissie, A., 2013. Relationship between leadership styles of nurse managers and nurses' job satisfaction in Jimma University Specialized Hospital. *Ethiopian Journal of Health Sciences*, 23(1), pp.49-58.



Nguyen, C., McElroy, L.M., Abecassis, M.M., Holl, J.L. and Ladner, D.P., 2015. The use of technology for urgent clinician to clinician communications: a systematic review of the literature. *International Journal of Medical Informatics*, 84(2), pp.101-10.

Nikolaus, T., Specht-Leible, N., Bach, M., Oster, P. and Schlierf, G., 1999. A randomized trial of comprehensive geriatric assessment and home intervention in the care of hospitalized patients. *Age and Ageing*, 28(6), pp.543-50.

Nishinaga, M., 2007. Comprehensive geriatric assessment and team intervention. *Japan Medical Association Journal*, 50(6), pp.461-6.

Nolan, M. and Caldock, K., 1996. Assessment: identifying the barriers to good practice. *Health and Social Care in the Community*, 4(2), pp.77-85.

Northouse, P.G., 2016. *Leadership, theory and practice*. 7<sup>th</sup> ed. Thousand Oaks, CA: SAGE Publishing.

Nursing & Midwifery Council, 2010. *Standards for pre-registration nursing education*. [pdf] London: NMC. Available at: <https://www.nmc.org.uk/globalassets/sitedocuments/standards/nmc-standards-for-pre-registration-nursing-education.pdf> [Accessed 8 March 2017].

Nursing & Midwifery Council, 2014. *Standards for competence for registered nurses*. [pdf] London: NMC. Available at: <https://www.nmc.org.uk/globalassets/sitedocuments/standards/nmc-standards-for-competence-for-registered-nurses.pdf> [Accessed: 4th April 2013].

Nursing & Midwifery Council, 2015. *The code, standards of conduct, performance and ethics for nurses and midwives*. [pdf] London: NMC. Available at: <https://www.nmc.org.uk/globalassets/sitedocuments/nmc-publications/nmc-code.pdf> [Accessed 5 February 2017].

Oborn, E. and Dawson, S., 2010. Knowledge and practice in multi-disciplinary teams: Struggle, accommodation and privilege. *Human Relations*, 63(12), pp.1835-57.

Oliver, D., Foot, C. and Humphries, R., 2014. *Making our health and care system fit for an ageing population*. [pdf] London: The King's Fund. Available at: [https://www.kingsfund.org.uk/sites/files/kf/field/field\\_publication\\_file/making-health-](https://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/making-health-)

[care-systems-fit-ageing-population-oliver-foot-humphries-mar14.pdf](#) [Accessed 5 February 2017].

Olsson, L., Jakobsson Ung, E., Swedberg, K. and Ekman, E., 2013. Efficacy of person-centred care as an intervention in controlled trials- a systematic review. *Journal of Clinical Nursing*, 22(3-4), pp.456-65.

Oo, M.T., Tencheva, A., Khalid, N., Chan, Y.P. and Ho, S.F. 2013. Assessing frailty in the acute medical admission of elderly patients. *The Journal of the Royal College of Physicians of Edinburgh*, 43(4), pp.301-8.

Osborne, K., 2014. Complaints to NMC about nurses increase by 14 per cent in a year. *Nursing Standard*, 29(13), p.9.

Oxford Dictionary of English, 2015. *Definition of paradigm in English*. [online] Oxford: Oxford University Press. Available at: <http://oxforddictionaries.com/definition/english/paradigm> [Accessed 10 February 2017].

Paley, J., 2002. Caring as a slave morality: Nietzschean themes in nursing ethics. *Journal of Advanced Nursing*, 40(1), pp.25-35.

Papastavrou, E., Andreou, P. and Efstathiou, G., 2014. Rationing of nursing care and nurse-patient outcomes: a systematic review of quantitative studies. *The International Journal of Health Planning and Management*, 29(1), pp.3-25.

Parker, G., Bhakta, P., Katbamna, S., Lovett, C., Paisley, S., Parker, S., Phelps, K., Baker, R., Jagger, C., Lindesay, J., Shepperdson, B. and Wilson, A., 2000. Best place of the care of older people after acute and during subacute illness: a systematic review. *Journal of Health Services Research & Policy*, 5(3), pp.176-89.

Parks, R.M., Lakshmanan, R., Winterbottom, L., Al Morgan, D., Cox, K. and Cheung, K.L., 2012. Comprehensive geriatric assessment for older women with early breast cancer - a systematic review of literature. *World Journal of Surgical Oncology*, 10: 88. doi: 10.1186/1477-7819-10-88.

Parlevliet, J.L., Buurman, B.M., Pannekeet, M.M., Boeschoten, E.M., Ten Brinke, L., Hamaker, M.E., Van Munster, B.C. and De Rooij, S.E., 2012. Systematic comprehensive

geriatric assessment in elderly patients on chronic dialysis: a cross-sectional comparative and feasibility study. *BMC Nephrology*, 13: 30. doi: 10.1186/1471-2369-13-30.

Parmelin, H., 1966. *Picasso says*. Translated from French by C. Trollope, 1969. London: George Allen & Unwin Ltd.

Partridge, J.S., Harari, D., Martin, F.C. and Dhesi, J.K., 2014. The impact of pre-operative comprehensive geriatric assessment on post-operative outcomes in older patients undergoing scheduled surgery: a systematic review. *Anaesthesia*, 69 Suppl 1:8-16. doi: 10.1111/anae.12494.

Patriotta, G. and Gruber, D.A., 2015. Newsmaking and sensemaking: Navigating temporal transitions between planned and unexpected events. *Organization Science*, 26(6), pp.1574-92.

Payne, M., 2000. *Collaboration in multiprofessional care*. New York: Palgrave.

Peirce, C.S., 1877. The fixation of belief. In: H.S. THAYER, ed. 1982. *Pragmatism the classic writings*. Indianapolis: Hackett Publishing Company. pp.61-78.

Penney, W., Poulter, N., Cole, C. and Wellard, S., 2016. Nursing assessment of older people who are in hospital: exploring registered nurses' understanding of their assessment skills. *Contemporary Nurse*, 52(2-3), pp.313-25.

Persenius, M.W., Hall-Lord, M.L., Baath, C. and Larsson, B.W., 2008. Assessment and documentation of patients' nutritional status: perceptions of registered nurses and their chief nurses. *Journal of Clinical Nursing*, 17(16), pp.2125-36.

Persoon, A., Van Der Crujisen, M., Schlattmann, N., Simmes, F. and Van Achterberg, T., 2011. How older people nurses assess cognitive function through daily observation. *International Journal of Older People Nursing*, 6(2), pp.102-9.

Peters, E., Hess, T.M., Västfjäll, D. and Auman, C., 2007. Adult age differences in dual information processes: implications for the role of affective and deliberate processes in older adults' decision making. *Perspectives on Psychological Science*, 2(1), pp.1-23.

Phelan, A. and McCormack, B., 2016. Exploring nursing expertise in residential the care of older people: a mixed method study. *Journal of Advanced Nursing*, 72(10), pp.2524-35.

Piaget, J., 1950. *The psychology of the child*. Translated from French by H. Weaver, 1972. New York: Basic Books.

Piantadosi, C., Chapman, I.M., Naganathan, V., Hunter, P., Cameron, I.D. and Visvanathan, R., 2015. Recruiting older people at nutritional risk for clinical trials: what have we learned? *BMC Research Notes*, 8; 151. doi: 10.1186/s13104-015-1113-0.

Pilgrim, D., Tomasini, F. and Vassilev, I., 2011. *Examining trust in healthcare: a multidisciplinary perspective*. New York: Palgrave Macmillan.

Pilotto, A., Ferrucci, L., Scarcelli, C., Niro, V., Di Mario, F., Seripa, D., Andriulli, A., Leandro, G. and Franceschi, M., 2007. Usefulness of the comprehensive geriatric assessment in older patients with upper gastrointestinal bleeding: a two-year follow-up study. *Digestive Diseases*, 25(2), pp.124-8.

Pilotto, A., Ferrucci, L., Franceschi, M., D'Ambrosio, L.P., Scarcelli, C., Cascavilla, L., Paris, F., Placentino, G., Seripa, D., Dallapiccola, B. and Leandro, G., 2008. Development and validation of a multidimensional prognostic index for one-year mortality from comprehensive geriatric assessment in hospitalized older patients. *Rejuvenation Research*, 11(1), pp.151-61.

Pilotto, A., Addante, F., Ferrucci, L., Leandro, G., D'Onofrio, G., Corritore, M., Niro, V., Scarcelli, C., Dallapiccola, B. and Franceschi, M., 2009a. The multidimensional prognostic index predicts short- and long-term mortality in hospitalized geriatric patients with pneumonia. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*, 64(8), pp.880-7.

Pilotto, A., Sancarolo, D., Panza, F., Paris, F., D'Onofrio, G., Cascavilla, L., Addante, F., Seripa, D., Solfrizzi, V., Dallapiccola, B., Franceschi, M. and Ferrucci, L., 2009b. The Multidimensional Prognostic Index (MPI), based on a comprehensive geriatric assessment predicts short- and long-term mortality in hospitalized older patients with dementia. *Journal of Alzheimer's Disease*, 18(1), pp.191-9.

Pilotto, A., Panza, F., Scarlando, D., Paroni, G., Maggi, S. and Ferruccini, L., 2012. Usefulness of the multi-dimensional prognostic index (MPI) in the management of older patients with chronic kidney disease. *Journal of Nephrology*, 25 Suppl 19:S79-84. doi: 10.5301/jn.5000162.

- Pilotto, A., Cella, A., Pilotto, A., Daragjati, J., Veronese, N., Musacchio, C., Mello, A.M., Logroscino, G., Padovani, A., Prete, C. and Panza, F., 2017. Three decades of comprehensive geriatric assessment: evidence coming from different health care settings and specific clinical conditions. *Journal of the American Medical Directors Association*, 18(2): 192.e1-192.e11. doi: 10.1016/j.jamda.2016.11.004.
- Pirhonen, L., Olofsson, E.H., Fors, A., Ekman, I. and Bolin, K., 2017. Effects of person-centred care on health outcomes- a randomized controlled trial in patients with acute coronary syndrome. *Health Policy*, 121(2), pp.169-79.
- Polanyi, M., 1966. *The tacit dimension*. London: Routledge and Kegan Paul Ltd.
- Polit, D.F. and Beck, C.T., 2016. *Nursing Research: Generating and Assessing Evidence for Nursing Practice*. 10<sup>th</sup> ed. Philadelphia: Lippincott Williams and Wilkins.
- Pollard, S., Bansback, N. and Bryan, S., 2015. Physicians' attitudes toward shared decision making: A systematic review. *Patient Education and Counseling*, 98(9), pp.1046-57.
- Popper, K.R., 1959. *The logic of scientific discovery*. London: Hutchinson.
- Potrac, P., Jones, R.L. and Nelson, L., 2014. Interpretivism. In: L. Nelson, R. Groom and P. Potrac, eds. 2014. *Research methods in sports coaching*. London: Routledge. pp.31-41.
- Pretzlik, U., 1994. Observational methods and strategies. *Nurse Researcher*, 2(2), pp.13-21.
- Propp, K.M., Apker, J., Zabava Ford, W.S., Wallace, N., Serbenski, M. and Hofmeister, N., 2010. Meeting the complex needs of the health care team: Identification of Nurse-Team communication practices perceived to enhance patient outcomes. *Qualitative Health Research*, 20(1), pp.15-28.
- Provencher, V., Mortenson, W.B., Tanguay-Garneau, L., Bélanger, K. and Dagenais, M., 2014. Challenges and strategies pertaining to recruitment and retention of frail elderly in research studies: A systematic review. *Archives of Gerontology and Geriatrics*, 59(1), pp.18-24.
- Puddephatt, A., 2009. The search for meaning: Revisiting Herbert Blumer's interpretation of G.H. Mead. *The American Sociologist*, 40(1-2), pp.89-105.

Puts, M.T., Santos, B., Hardt, J., Monette, J., Girre, V., Atenafu, E.G., Springall, E. and Alibhai, S.M., 2014. An update on a systematic review of the use of geriatric assessment for older adults in oncology. *Annals of Oncology*, 25(2), pp.307-15.

Quartararo, M., 1996. Health outcomes and geriatric assessment: making literature reviews relevant to current programs. *Australian Journal on Ageing*, 15(1), pp.32-7.

Randmaa, M., Mårtensson, G., Swenne C.L. and Engström, M., 2014. SBAR improves communication and safety climate and decreases incident reports due to communication errors in an anaesthetic clinic: a prospective intervention study. *British Medical Journal Open*, 4(1):e004268. doi: 10.1136/bmjopen-2013-004268.

Raveau, T., Annweiler, C., Chudeau, N., Gergaud, S., Thiery, S., Gautier, J., Beauchet, O., Merchat, A. and Lerolle, N., 2013. Comprehensive geriatric assessment in intensive care unit: a pilot study (pre-Senioria). *Geriatric et Psychologie Neuropsychiatrie du Vieillessement*, 11(4), pp.389-95.

Reed, J., Inglis, P., Cook, G., Clarke, C. and Cook, M., 2007. Specialist nurses for older people: implications from UK development sites. *Journal of Advanced Nursing*, 58(4), pp.368-76.

Reed, R.L., Kligman, E.W. and Weiss, B.D., 1990. Comprehensive geriatric assessment recommendations: adherence of family practice residents. *The Journal of Family Practice*, 31(4), pp.389-92.

Reeves, S., Lewin, S., Espin, S. and Zwarenstein, M., 2010. *Interprofessional Collaboration for Health and Social Care*. Oxford: Wiley-Blackwell.

Research Councils UK, 2013. *RCUK Policy and guidelines on governance of good research conduct*. [pdf] Swindon: Research Councils UK. Available at: <http://www.rcuk.ac.uk/documents/reviews/grc/rcukpolicyandguidelinesongovernanceofgoodresearchpracticefebruary2013-pdf/> [Accessed 7 February 2017].

Reuben, D.B., Maly, R.C., Hirsch, S.H., Frank, J.C., Oakes, A.M., Siu, A.L. and Hays, R.D., 1996. Physician implementation of and patient adherence to recommendations from comprehensive geriatric assessment. *The American Journal of Medicine*, 100(4), pp.444-51.

Richardson, J., 2013. The Easy-Care assessment system and its appropriateness for older people. *Nursing Older People*. 13(7), pp.17-9.

Ritch, A., 2012. History of geriatric medicine: from Hippocrates to Marjory Warren. *The Journal of the Royal College of Physician of Edinburgh*, 42(4), pp.368-74.

Rockwood, K., Song, X., MacKnight, C., Bergman, H., Hogan, D.B., McDowell, I. and Mitnitski, A., 2005. A global clinical measure of fitness and frailty in elderly people. *Canadian Medical Association Journal*, 173(5), pp.489-95.

Rodríguez-Pascual, C., Vilches-Moraga, A., Paredes-Galán, E., Ferrero-Marinez, A.I., Torrente-Carballido, M. and Rodríguez-Artalejo, F., 2012. Comprehensive geriatric assessment and hospital mortality among older adults with decompensated heart failure. *American Heart Journal*, 164(5), pp.756-62.

Rogers, C., 1980. *A way of being*. New York: Houghton Mifflin.

Royal College of Nursing, 2004. *Nursing assessment and older people*. [pdf] London: RCN. Available at: [https://my.rcn.org.uk/\\_data/assets/pdf\\_file/0010/78616/002310.pdf](https://my.rcn.org.uk/_data/assets/pdf_file/0010/78616/002310.pdf). [Accessed 30 October 2017]

Royal College of Nursing, 2013. *Beyond breaking point? A survey of report of RCN members on health, wellbeing and stress*. [pdf] London: Royal College of Nursing. Available at: [https://www2.rcn.org.uk/\\_data/assets/pdf\\_file/0005/541778/004448.pdf](https://www2.rcn.org.uk/_data/assets/pdf_file/0005/541778/004448.pdf) [Accessed 7 February 2017].

Royal College of Nursing, 2014. *Defining nursing*. [pdf] London: The Royal College of Nursing. Available at: <https://www.rcn.org.uk/professional-development/publications/pub-004768> [Accessed 7 February 2017].

Royal College of Physicians, 2015. *Acute Care Toolkit 3: Acute medical care for frail older people*. [online] London: Royal College of Physicians. Available at: <https://www.rcplondon.ac.uk/guidelines-policy/acute-care-toolkit-3-acute-medical-care-frail-older-people> [Accessed 7 February 2017].

Royal College of Physicians of London, 1977. *Report of the working party of the royal college of physicians, medical care for the elderly*. London: Royal College of Physicians of London.

Rubenstein, L.Z., Abrass, I.B. and Kane, R.L., 1981. Improved care for patients on a new geriatric evaluation unit. *Journal of the American Geriatrics Society*, 29(11), pp.531-6.

Rubenstein, L.Z., Josephson, K.R., Wieland, G.D., English, P.A., Sayre, J.A. and Kane, R.L., 1984. Effectiveness of a geriatric evaluation unit. A randomized clinical trial. *New England Journal of Medicine*, 311(26), pp.1664-70.

Rubenstein, L.Z., Stuck, A.E., Siu, A.L. and Wieland, D., 1991. Impacts of geriatric evaluation and management programs on defined outcomes: overview of the evidence. *Journal of the American Geriatrics Society*, 39(9 Pt 2), 8S-16S; discussion 17S-18S.

Rubenstein, L.Z. and Stuck, A.E., 2006. Multidimensional Geriatric Assessment. In: M.S.J. Pathy, A.J. Sinclair, J.E. Morley, eds. 2006. *Principles and Practice of Geriatric Medicine, Volume 2*. 4th ed. New Jersey: John Wiley and Sons.

Rubin, H.J. and Rubin, I.S., 2005. *Qualitative interviewing, the art of hearing data*. 2<sup>nd</sup> ed. Thousand Oaks, CA: SAGE Publishing.

Rycroft-Malone, J., Fontenla, M., Seers, K. and Bick, D. 2009. Protocol-based care: the standardisation of decision-making? *Journal of Clinical Nursing*, 18(10), pp.1490-500.

Rycroft-Malone, J., Fontenla, M., Bick, D. and Seers, K., 2010. A realistic evaluation: the case of protocol based care. *Implementation Science*, 5: 38. doi: 10.1186/1748-5908-5-38.

Sackett, D.L., Rosenberg, W.C. and Gray, J.A., 1996. Evidence based medicine: what it is and what it isn't. *British Medical Journal*, 312(7023), pp.71-2.

Sackett, D.L., Straus, S.E., Richardson, W.C., Rosenberg, W. and Haynes, R.B., 2000. *Evidence-Based Medicine: How to practice and teach EBM*. 2<sup>nd</sup> ed. New York: Churchill Livingstone.

Salas, E., Sims, D.E. and Burke, C.S., 2005. Is there a "Big Five" in teamwork? *Small Group Research*, 36(5), pp.555-99.

Salas, E., Wilson, K.A., Murphy, C.E., King, H. and Salisbury, M., 2008. Communicating, coordinating, and cooperation when lives depend on it: tips for teamwork. *Joint Commission Journal on Quality and Patient Safety*, 34(6), pp.333-41.



Saltvedt, I., Mo, E.S., Fayers, P., Kaasa, S. and Sletvold, O., 2002. Reduced mortality in treating acutely sick, frail older patients in a geriatric evaluation and management unit. A prospective randomized trial. *Journal of the American Geriatrics Society*, 50(5), pp.792-8.

Sampson, E.L., Blanchard, M.R., Jones, L., Tookman, A. and King, M., 2009. Dementia in the acute hospital: prospective cohort study of prevalence and mortality. *The British Journal of Psychiatry*, 195(1), pp.61-6.

Samra, R., Griffiths, A., Cox, T., Conroy, S., Gordon, A. and Gladman, J.R.F., 2015. Medical student's and doctors' attitudes towards older patients and their care in hospital settings: a conceptualisation. *Age and Ageing*, 44(5), pp.776-83.

Savage, J., 1995. Political implications of the named nurse concept. *Nursing Times*, 91(41), pp.36-7.

Scheibler, F., Stoffel, M.P., Barth, C., Kuch, C., Steffen, P., Baldamus, C.A. and Pfaff, H., 2005. Shared decision-making as a new quality indicator in nephrology: a nationwide survey in Germany. *Medizinische Klinik*, 100(4), pp.193-9.

Schilte, A.F., Portegijs, P.J., Blankenstein, A.H. and Knottnerus, J.A. 2000. Somatisation in primary care: Clinical judgement and standardised measurement compared. *Social Psychiatry and Psychiatric Epidemiology*, 35(6), pp.276-82.

Schön, D.A., 1995. *The reflective practitioner: how professionals think in action*. Farnham: Ashgate Publishing.

Scott, I., 1999. Optimising care of the hospitalised elderly. A literature review and suggestions for future research. *Australian and New Zealand Journal of Medicine*, 29(2), pp.254-64.

Segen's Dictionary, 2012. Assessment. [online] Huntington Valley: Farley, Inc. Available at: <https://medical-dictionary.thefreedictionary.com/assessment>. [Accessed 30 Oct 2017].

Sheehan, D., Robertson, L. and Ormond, T., 2007. Comparison of language used and patterns of communication in interprofessional and multidisciplinary teams. *Journal of Interprofessional Care*, 21(1), pp.17-30.

- Shoham, D.A., Harris, J.K., Mundt, M. and McGaghie, W., 2016. A network model of communication in an interprofessional team of healthcare professionals: A cross-sectional study of a burn unit. *Journal of Interprofessional Care*, 30(5), pp.661-7.
- Siegler, E.L. and Glick, D.L., 2003. Optimal staffing for acute care of elderly (ACE) units. *Geriatric Nursing*, 23(3), pp.152-5.
- Sinclair, L.B., Lingard, L.A. and Mohabeer, R.N. 2009. What's so great about rehabilitation teams? An ethnographic study of interprofessional collaboration in a rehabilitation unit. *Archives of Physical Medicine and Rehabilitation*, 90(7), pp.1196-201.
- Sims, S., Hewitt, G. and Harris, R., 2015a. Evidence of a shared purpose, critical reflection, innovation and leadership in interprofessional healthcare teams: a realist synthesis. *Journal of Interprofessional Care*, 29(3), pp.209-15.
- Sims, S., Hewitt, G. and Harris, R., 2015b. Evidence of collaboration, pooling of resources, leaning and role blurring in interprofessional healthcare teams: a realist synthesis. *Journal of Interprofessional Care*, 29(1), pp.20-5.
- Smith, F., Lambert, T.W., Pitcher, A. and Goldacre, M.J., 2013. Career choices for cardiology: cohort studies of UK medical graduates. *BMC Medical Education*, 13: 10, doi: 10.1186/1472-6920-13-10.
- Smith, J.A. and Osborn, M., 2015. Interpretative phenomenological analysis as a useful methodology for research on the lived experience of pain. *British Journal of Pain*, 9(1), pp.41-2.
- Smith, M.C., 1992. Is all knowing personal knowing? *Nursing Science Quarterly*, 5(1), pp.2-3.
- Soejono, C.H., 2008. The impact of 'comprehensive geriatric assessment (CGA)' implementation on the effectiveness and cost (CEA) of healthcare in an acute geriatric ward. *Acta Medica Indonesiana*, 40(1), pp.3-10.
- Soleimani, M. and Seyedfatemi, N., 2010. Participation of patients with chronic illness in nursing care: An Iranian perspective. *Nursing & Health Sciences*, 12(3), pp.345-51.

- Soong, J., Poots, A.J., Scott, S., Donald, K., Woodcock, T., Lovett, D. Bell, D., 2015. Quantifying the prevalence of frailty in English hospitals. *British Medical Journal Open*, 5(10), e008456. doi: 10.1136/bmjopen-2015-008456.
- Sorrells-Jones, J., 1997. The challenge of making it real: interdisciplinary practice in a 'seamless' organisation. *Nursing Administration Quarterly*, 21(2), pp.20-30.
- Spencer-Oatey, H., 2012. *What is culture? A compilation of quotations*. [pdf] Warwick: GlobalPAD Core Concepts. Available at: [http://www2.warwick.ac.uk/fac/soc/al/globalpad/openhouse/interculturalskills/globalpad\\_-\\_what\\_is\\_culture.pdf](http://www2.warwick.ac.uk/fac/soc/al/globalpad/openhouse/interculturalskills/globalpad_-_what_is_culture.pdf) [Accessed 8 February 2017].
- Spies, C.D., Schulz, C.M., Weiss-Gerlach, E., Neuner, B., Neumann, T., Von Dossow, V., Schenk, M., Wernecke, K.D. and Elwyn, G., 2006. Preferences for shared decision making in chronic pain patients compared with patients during a premedication visit. *Acta Anaesthesiologica Scandinavica*, 50(8), pp.1019-26.
- Spina, M., Balzarotti, M., Uziel, L., Ferreri, A.J., Fratino, L., Magagnoli, M., Talamini, R., Giacalone, A., Ravaioli, E., Chimienti, E., Berretta, M., Lleshi, A., Santoro, A. and Tirelli, U., 2012. Modulated chemotherapy according to modified comprehensive geriatric assessment in 100 consecutive elderly patients with diffuse large B-cell lymphoma. *The Oncologist*, 17(6), pp.838-46.
- Stacey, D., Légaré, F. and Kryworuchko, J., 2009. Evidence-based health care decision-making: Roles for health professionals. In: A. Edwards and G. Elwyn, eds. 2009. *Shared Decision-Making in Health Care, achieving evidence-based patient choice*. 2<sup>nd</sup> ed. Oxford: University Press. pp.29-36.
- Stake, R.E., 1995. *The art of Case Study Research*. Thousand Oaks, CA: SAGE Publishing.
- Stake, R.E., 2005. *Multiple Case Study Analysis*. New York: Guilford Press.
- Steele, J.S., 2010. Current evidence regarding models of acute care for hospitalized geriatric patients. *Geriatric Nursing*, 31(5), pp.331-47.
- Sternberg, S.A., Wershof Schwartz, A., Karunananthan, S., Bergman, H. and Mark Clarfield, A., 2011. The identification of frailty: a systematic literature review. *Journal of the American Geriatrics Society*, 59(11), pp.2129-38.

- St John, P.D. and Hogan, D.B., 2014. Special Issue: Remembering our roots. The relevance of Marjory Warren's writings today. *The Gerontologist*, 54(1), pp.21-9.
- Stortecky, S., Schoenenberger, A.W., Moser, A., Kalesan, B., Juni, P., Carrel, T., Bischoff, S., Schoenenberger, C.M., Stuck, A.E., Windecker, S. and Wenaweser, P., 2012. Evaluation of multidimensional geriatric assessment as a predictor of mortality and cardiovascular events after transcatheter aortic valve implantation. *JACC Cardiovascular Interventions*, 5(5), pp.489-96.
- Strauss, A., 1978. *Negotiations: varieties, contexts, processes, and social order*. New York: Jossey-Bass.
- Strauss, A., 1993. *Continual permutations of action*. New York: Aldine de Gruyter.
- Strauss, A. and Corbin, J., 1998. *Basic of qualitative research: Techniques and Procedures for Developing Grounded Theory*. 2<sup>nd</sup> ed. Thousand Oaks, CA: SAGE Publishing.
- Strübing, J., 2007. Research as pragmatic problem-solving: the pragmatist roots of empirically-grounded theorizing. In: A. Bryant and K. Charmaz, eds. 2007. *The SAGE Handbook of Grounded Theory*. Thousand Oaks, CA: SAGE Publishing. pp.580-601.
- Stuck, A.E., Siu, A.L., Wieland, G.D., Adams, J. and Rubenstein, L.Z., 1993. Comprehensive geriatric assessment: a meta-analysis of controlled trials. *Lancet*, 342(8878), pp.1032-6.
- Suri, H., 2011. Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal*, 11,(2), pp.63-75.
- Sørensen, D., Frederiksen, K., Groefte, T. and Lomborg, K., 2013. Nurse-patient collaboration: A Grounded Theory study of patients with chronic obstructive pulmonary disease on non-invasive ventilation. *International Journal of Nursing Studies*, 50(1), pp.26-33.
- Tang, C.J., Chan, S.W., Zhou, W.T. and Liaw, S.Y., 2013. Collaboration between hospital physicians and nurses: an integrated literature review. *International Nursing Review*, 60(3), pp.291-302.
- Tanner, C.A., Benner, P., Chesla, C. and Gordon, D.R., 1993. The phenomenology of knowing the patient. *Image- The Journal of Nursing Scholarship*, 25(4), pp.273-80.

- Tashakkori, A. and Teddlie, C., 2010. *Handbook of Mixed Methods in Social and Behavioral Research*. Thousand Oaks, CA: SAGE Publishing.
- Thompson, M., 2012. *Understand philosophy of science: teach yourself*. London: Teach Yourself.
- Timmons, S., Manning, E., Barrett, A., Brady, N.M., Browne, V., O'Shea, E., Molloy, D.W., O'Regan, N.A., Trawley, S., Cahil, S., O'Sullivan, K., Woods, N., Maegher, D., Ni Chorcair, A.M. and Linehan, J.G., 2015. Dementia in older people admitted to hospital: a regional multi-hospital observational study of prevalence, associations and case recognition. *Age and Ageing*, 44(6), pp.993-9.
- Tobiano, G., Marshall, A., Bucknall, T. and Chaboyer, W., 2015. Patient participation in nursing care on medical wards: An integrative review. *International Journal of Nursing Studies*, 52(6), pp.1107-20.
- Topinková, E., 2008. Aging, disability and frailty. *Annals of Nutrition & Metabolism*, 52(Suppl 1), pp.6-11.
- Totten, A., Carson, S., Peterson, K., Low, A., Christensen, V. and Tiwari, A., 2011. *Evidence Brief: Effect of Geriatricians on Outcomes of Inpatient and Outpatient Care*. VA Evidence-based Synthesis Program Project. [pdf] Portland: ESP Coordinating Center. Available at: [https://www.ncbi.nlm.nih.gov/books/NBK98020/pdf/Bookshelf\\_NBK98020.pdf](https://www.ncbi.nlm.nih.gov/books/NBK98020/pdf/Bookshelf_NBK98020.pdf) [Accessed 10 February 2017].
- Townsend, A., 2013. *Action Research: The challenges of understanding and researching practice*. Berkshire: Open University Press.
- Turner, G. And Clegg, T., 2014. Best practice guidelines for the management of frailty: a British Geriatrics Society, Age UK and Royal College of General Practitioners report. *Age and Ageing*, 43(6), pp.744-7.
- Tutton, E. and Seers, K., 2004. Comfort on a ward for older people. *Journal of Advanced Nursing*, 46(4), pp.380-9.
- Tutton, E. and Langstaff, D., 2015. Reflection on Isabel Mezien Lyth in the light of developments in nursing care. In: D. Armstrong and M. Rustin, eds. 2015. *Social defences against anxiety: Explorations in a paradigm*. London: Karnac Books. pp.111-23.

United Kingdom Research Integrity Office, 2009. *Code of practice for research: promoting good practice and preventing misconduct*. [pdf] London: UK Research Integrity Office. Available at: <http://www.ukrio.org/wp-content/uploads/UKRIO-Code-of-Practice-for-Research.pdf> [Accessed 10 February 2017].

University of Leicester and University of Bristol, 2010. *Adults lacking capacity to consent*. [online] Leicester and Bristol: University of Leicester and University of Bristol. Available at: <https://connect.le.ac.uk/alctoolkit/> [Accessed 21 May 2017].

University of Warwick, 2016. Research Integrity. [online] Warwick: University of Warwick. Available at: [http://www2.warwick.ac.uk/services/rss/researchgovernance\\_ethics/](http://www2.warwick.ac.uk/services/rss/researchgovernance_ethics/) [Accessed: 10 February 2017].

Van Assen, M.A.L.M., Pallast, E., El Fakiri, F. and Gobbens, R.J.J., 2016. Measuring frailty in Dutch community-dwelling older people: Reference values of the Tilburg Frailty Indicator (TFI). *Archives of Gerontology and Geriatrics*, 67, pp.120-9.

Van Craen, K., Braes, T., Wellens, N., Denhaerynck, K., Flamaing, J., Moons, P., Boonen, S., Gosset, C., Petermans, J. and Milisen, K., 2010. The effectiveness of inpatient geriatric evaluation and management units: a systematic review and meta-analysis. *Journal of the American Geriatrics Society*, 58(1), pp.83-92.

Van Den Akker, M., Buntinx, F., Metsemakers, J.F., Roos, S. and Knottnerus, J.A., 1998. Multimorbidity in general practice: prevalence, incidence, and determinants of co-occurring chronic and recurrent diseases. *Journal of Clinical Epidemiology*, 51(5), pp.367-75.

Van Der Zee, J. and Kroneman, M.W., 2007. Bismarck or Beveridge: a beauty contest between dinosaurs. *BMC Health Services Research*, 7: 94. doi: 10.1186/1472-6963-7-94.

Van Kaam, A., 1966. *Existential Foundation of psychology*. Pittsburgh: Duquesne University Press.

Van Maanen, J., 1988. *Tales of the field: on writing ethnography*. Chicago: University of Chicago Press.

Van Manen, M., 1990. *Researching lived experience: Human science for an Action Sensitive Pedagogy*. Ontario: Althouse Press.

- Van Manen, M., 2006. Writing qualitatively or the demands of writing. *Qualitative Health Research*, 16(5), pp.713-22.
- Van Manen, M., 2007. Phenomenology of practice. *Phenomenology and Practice*, 1(1), pp.11-30.
- Van Oostrom, S.H., Picavet, H.S., Van Gelder, B.M., Lemmens, L.C., Hoeymans, N., Van Dijk, C.E., Verheij, R.A., Schellevis, F.G. and Baan, C.A., 2012. Multimorbidity and comorbidity in the Dutch population-data from general practices. *BMC Public Health*, 12: 715. doi: 10.1186/1471-2458-12-715.
- Vize, R., 2012. *Delivering dignity*. [pdf] London: Commission on Dignity in Care. Available at: <http://www.ageuk.org.uk/Global/Delivering%20Dignity%20Report.pdf?dtrk=true> [Accessed 10 February 2017].
- Volpato, S., Bazzano, S., Fontana, A., Ferrucci, L., Pilotto, A. and MPI-TriVeneto Study Group., 2014. Multidimensional prognostic index predicts mortality and length of stay during hospitalization in the older patients: a multicenter prospective study. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*, 70(3), pp.325-31.
- Wainwright, P., 2000. Towards an aesthetics of nursing. *Journal of Advanced Nursing*, 32(3), pp.750-6.
- Walker, E. and Dewar, B.J., 2000. Moving on from interpretivism: an argument for constructivist evaluation. *Journal of Advanced Nursing*, 32(3), pp.713-20.
- Wang, M.L., Gallivan, L., Lemon, S.C., Borg, A., Ramirez, J., Figueroa, B., McGuire, A. and Rosal, M.C., 2015. Navigating to health: Evaluation of a community health center patient navigation program. *Preventive Medicine Reports*, 2, pp.664-8.
- Warren, M., 1946. Care of the chronic aged sick. *Lancet*, 1(6406), pp.841-3.
- Watterson, L., Currie, L. and Seers, K., 2015. *Stepping in, stepping out, stepping up. Research evaluating the ward sister supervisory role (REWardSS)*. [pdf] London; Royal College of Nursing. Available at: <https://www.rcn.org.uk/professional-development/publications/pub-005026> [Accessed 10 February 2017].

- Weber, M., 1904. Objectivity in social science and social policy. In: M. Weber, 1904. *The methodology of social sciences*. Translated by E.A. Shils and H.A. Finch, eds. 1949. Glencoe: Free Press. pp.50-112.
- Webster, C., 1991. The elderly and the early National Health Service. In: M. Pelling and R.M. Smith, eds. 1991. *Life, death and the elderly: Historical perspectives*. London: Routledge. pp.165-93.
- Weick, K.E., 1995. *Sensemaking in organizations*. Thousand Oaks, CA: SAGE Publishing.
- Weick, K.E., 1998. Improvisation as a mindset for organizational analysis. *Organization Science*, 9(5), pp.543-55.
- Wellens, N.I., Deschodt, M., Flamaing, J., Moons, P., Boonen, S., Boman, X., Gosset, C., Petermans, J. and Milisen, K., 2011a. First-generation versus third-generation comprehensive geriatric assessment instruments in the acute hospital setting: a comparison of the Minimum Geriatric Screening Tools (MGST) and the interRAI Acute Care (interRAI AC). *Journal of Nutrition, Health & Aging*, 15(8), pp.638-44.
- Wellens, N.I., Deschodt, M., Boonen, S., Flamaing, J., Gray, L., Moons, P. and Milisen, K., 2011b. Validity of the interRAI Acute Care based on test content: a multi-center study. *Aging: Clinical and Experimental Research*, 23(5-6), pp.476-86.
- Wellens, N.I., Van Lancker, A., Flamaing, J., Gray, L., Moons, P., Verbeke, G., Boonen, S. and Milisen, K., 2012a. Interrater reliability of the interRAI Acute Care (interRAI AC). *Archives of Gerontology and Geriatrics*, 55(1), pp.165-72.
- Wellens, N.I., Flamaing, J., Moons, P., Deschodt, M., Boonen, S. and Milisen, K., 2012b. Translation and adaption of the interRAI suite to local requirements in Belgian hospitals. *BMC Geriatrics*, 12: 53. doi: 10.1186/1471-2318-12-53.
- Wengraf, T., 2001. *Qualitative research interviewing, biographic narrative and semi-structured methods*. Thousand Oaks, CA: SAGE Publishing.
- White, J., 1995. Patterns of knowing: Review, critique, and update. *Advances in Nursing Science*, 17(4), pp.73-86.
- Whittemore, R., Chase, S.K. and Mandle, C.L., 2001. Validity in qualitative research. *Qualitative Health Research*, 11(4), pp.522-37.



- Wieland, D. and Rubenstein, L.Z., 1996. What do we know about patient targeting in geriatric evaluation and management (GEM) programs? *Aging: Clinical and Experimental Research*, 8(5), pp.297-310.
- Wieland, D., 2003. The effectiveness and costs of comprehensive geriatric evaluation and management. *Critical Reviews in Oncology/Hematology*, 48(2), pp.227-37.
- Wieland, D. and Hirth, V., 2003. Comprehensive geriatric assessment. *Cancer Control*, 10(6), pp.454-62.
- Wieringa, S. and Greenhalgh, T., 2015. 10 years of mindlines: a systematic review and commentary. *Implementation Science*, 10: 45. doi: 10.1186/s13012-015-0229-x.
- Wijma, A.J., Bletterman, A., Clark, J.R., Vervoort, S.C.J.M., Beetsma, A. and Keizer, D. 2017. Patient-centredness in physiotherapy: What does it entail? A systematic review of qualitative studies. *Physiotherapy Theory and Practice*, 33(11), pp.825-40.
- Wiggins, J. and Bitzer, M., 2012. Geriatric assessment for the nephrologist. *Seminars in Dialysis*, 25(6), pp.623-7.
- Wilding, M.J., Seegert, L., Rupcic, S., Griffin, M., Kachnowski, S. and Parasuraman, S., 2013. Falling short: Recruiting elderly individuals for a fall study. *Ageing Research Reviews*, 12(2), pp.552-60.
- Williams, H., Harris, R. and Turner-Stokes, L., 2009. Work sampling: a quantitative analysis of nursing activity in a neuro-rehabilitation setting. *Journal of Advanced Nursing*, 65(10), pp.2097-107.
- Williams, L., Rycroft-Malone, J., Burton, C.R., Edwards, S., Fisher, D., Hall, B., McCormack, B., Nutley, S.M. Seddon, D. and Williams, R., 2016. Improving skills and care standards in the support workforce for older people: a realist synthesis of workforce development interventions. *British Medical Journal Open*, 6: e011964. doi:10.1136/bmjopen-2016-011964.
- Winter, G., 2000. A comparative discussion of the notion of "validity" in qualitative and quantitative research. *The Qualitative Report*, 4(3), Art.4.
- Wolcott, H.F., 2008. *Ethnography, a way of seeing*. Lanham: Altamira Press.

Wolff, J.L., Starfield, B. and Anderson, G., 2002. Prevalence, expenditures, and complications of multiple chronic conditions in the elderly. *Archives of Internal Medicine*, 162(20), pp.2269-76.

World Health Organisation, 2000. *The world health report 2000. Health systems: improving performance*. [pdf] Geneva: World Health Organisation. Available at: [http://www.who.int/whr/2000/en/whr00\\_en.pdf?ua=1](http://www.who.int/whr/2000/en/whr00_en.pdf?ua=1) [Accessed 10 February 2017].

World Health Organisation, 2002. *Active Ageing, a policy framework*. [pdf] Geneva: World Health Organisation. Available at: [http://whqlibdoc.who.int/hq/2002/WHO\\_NMH\\_NPH\\_02.8.pdf](http://whqlibdoc.who.int/hq/2002/WHO_NMH_NPH_02.8.pdf) [Accessed 10 February 2017].

World Health Organisation, 2011. *Global Health and Ageing*. [pdf] Geneva: World Health Organisation. Available at: [http://www.who.int/ageing/publications/global\\_health.pdf](http://www.who.int/ageing/publications/global_health.pdf) [Accessed 10 February 2017].

World Health Organisation, 2012a. *About ageing and life-course*. [online] Geneva: World Health Organisation. Available at: [http://www.who.int/ageing/about/ageing\\_life\\_course/en/index.html](http://www.who.int/ageing/about/ageing_life_course/en/index.html) [Accessed 10 February 2017].

World Health Organisation, 2012b. *WHOQOL-HIV Instrument*. [pdf] Geneva: World Health Organisation. Available at: [http://apps.who.int/iris/bitstream/10665/77774/1/WHO\\_MSD\\_MER\\_Rev.2012.01\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/77774/1/WHO_MSD_MER_Rev.2012.01_eng.pdf?ua=1) [Accessed 4 March 2017].

World Health Organisation, 2015. *World Report on Ageing and Health*. [pdf] Geneva: World Health Organisation. Available at: [http://apps.who.int/iris/bitstream/10665/186463/1/9789240694811\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/186463/1/9789240694811_eng.pdf?ua=1) [Accessed 10 February 2017].

World Health Organisation, 2016a. *Disability and health*. [online] Geneva: World Health Organisation. Available at: <http://www.who.int/mediacentre/factsheets/fs352/en/index.html> [Accessed 10 February 2017].

World Health Organisation, 2016b. *Global strategy and action plan on ageing and health (2016-2020)*. [pdf] Geneva: World Health Organisation. Available at: <http://www.who.int/ageing/GSAP-Summary-EN.pdf?ua=1> [Accessed 10 February 2017].

World Medical Association, 2013. *World Medical Association Declaration of Helsinki, ethical principles for medical research involving human subjects*. [pdf] Ferney-Voltaire: World Medical Association, Inc. Available at: <http://www.wma.net/en/20activities/10ethics/10helsinki/DoH-Oct2013-JAMA.pdf> [Accessed 8 February 2017].

Wu, R.C., Tran, K., Lo, V., O'Leary, K.J., Morra, D., Quan, S.D. and Perrier, L., 2012. Effects of clinical communication interventions in hospitals: a systematic review of information and communication technology adoptions for improved communications between clinicians. *International Journal of Medical Informatics*, 81(11), pp.723-32.

Xyrichis, A. and Lowtin, K., 2008. What fosters or prevents interprofessional collaborating in primary and community care? A literature review. *International Journal of Nursing Studies*, 45(1), pp.140-53.

Yin, R.K., 2003. *Case study research: Design and method*. 3<sup>rd</sup> ed. Thousand Oaks, CA: SAGE Publishing.

Zwarenstein, M., Goldman, J. and Reeves, S., 2009. Interprofessional collaboration: effects of practice-based interventions on professional practice and health-care outcomes. *The Cochrane Database of Systematic Reviews*, (3). doi: 10.1002/14651858.CD000072.pub2.

## Appendices

---

## Appendix 1, Search strategies for systematic review

### PubMed/Medline

(((((geriatric OR old\* OR elder\* OR senior) AND assessment)) OR ("inpatient rehabilitation") OR ("geriatric management and evaluation") OR ("acute care for elders") OR ("geriatric management") OR ("comprehensive geriatric assessment") OR ("geriatric evaluation") OR ("geriatric service") OR ("geriatric care") OR ("geriatric consultation") OR ("geriatric unit") OR ("the care of older people") OR ("geriatric units") OR ("geriatric assessment"[MeSH Terms])))

AND

(((((comprehensive) OR (holistic) OR (multi-dimensional) OR (multidimensional) OR ("multi dimensional") OR ("assessment tool") OR ("assessment instrument") OR (nurs\*) OR (evaluation) OR (management) OR (intervention))))

AND

((hospital) OR (hospital\*) OR ("hospitals"[MeSH Terms]) OR (ward) OR (wards) OR (clinic\*) OR (inpatient\*)))

NOT

((cancer[Title]) OR (oncology[Title]) OR ("medical oncology"[MeSH Terms]) OR (community[Title]) OR (fal\*[Title]) OR (pain[Title]) OR (depress\*[Title]) OR (nutrition[Title]) OR (nutritional[Title]) OR (diabet\*[Title]) OR (community-based[Title]) OR (community-dwelling[Title]) OR (dental[Title]) OR (oral[Title]) OR (delirium[Title]) OR (leukemia[Title]) OR ((malnutrition[Title]) OR (dementia[Title]) OR (incontinence[Title]) OR (home-based[Title]) OR (trauma[Title]) OR (abuse[Title]) OR ("primary care"[Title]) OR (pneumonia[Title]) OR (drug[Title]) OR (drugs[Title]) OR (fracture[Title]) OR ("home visits"[Title]) OR (chemotherapy[Title]) OR ("heart failure"[Title]) OR (education[Title]) OR (traumatic[Title]) OR (stroke[Title]) OR (ulcer[Title]) OR (ulcers[Title]) OR hypertension[Title]) OR ("Alzheimer's disease"[Title]) OR ("visual impairment[Title]) OR (palliative[Title]) OR (" AND end of life[Title]) OR (hospice[Title]) OR (replacement[Title]) OR (parkinson's[Title]) OR (gait[Title]) OR dialysis[Title]))))

Limits: Review, Abstract available, English, Dutch

### Cochrane

("comprehensive geriatric assessment") OR ("inpatient rehabilitation") OR ("geriatric management") OR ("geriatric management and evaluation") OR ("geriatric evaluation") OR ("geriatric service") OR ("geriatric care") OR ("acute care for elders") OR ("geriatric consultation") OR ("geriatric unit") OR ("geriatric units") OR ("geriatric assessment") (All text)

Limits: Cochrane reviews or other reviews.

### Cinahl

("comprehensive geriatric assessment") OR ("inpatient rehabilitation") OR ("geriatric management") OR ("geriatric management and evaluation") OR ("geriatric evaluation") OR ("geriatric service") OR ("geriatric care") OR ("acute care for elders") OR ("geriatric consultation") OR ("geriatric unit") OR ("geriatric units") OR ("geriatric assessment") (all text)

Limits: reviews, systematic reviews, meta-analysis, meta-syntheses, English, Dutch.

### Scopus

TITLE-ABS-KEY(("comprehensive geriatric assessment") OR ("inpatient rehabilitation") OR ("geriatric management") OR ("geriatric management and evaluation") OR ("geriatric evaluation") OR ("geriatric service") OR ("geriatric care") OR ("acute care for elders") OR ("geriatric consultation") OR ("geriatric unit") OR ("geriatric units") OR ("geriatric assessment"))

AND

TITLE-ABS-KEY (("hospital" OR " hospitals" OR "ward" OR "wards" OR "clinic" OR "inpatient" OR "inpatients"))

AND

TITLE-ABS-KEY (("holistic" OR "comprehensive" OR "multi-dimensional" OR "multidimensional" OR "multi dimensional" OR "assessment tool" OR "assessment instrument" OR "evaluation" OR "management" OR "intervention"))

Limits: reviews.

### Web of Science

Topic=("comprehensive geriatric assessment") OR ("inpatient rehabilitation") OR ("geriatric management") OR ("geriatric management and evaluation") OR ("geriatric evaluation") OR ("geriatric service") OR ("geriatric care") OR ("acute care for elders") OR ("geriatric consultation") OR ("geriatric unit") OR ("geriatric units") OR ("geriatric assessment")

NOT Title=("emergency department") NOT Title=(cancer) NOT Title=(community) NOT Title=(fall\*) NOT Title=(dementia) NOT Title=(fracture\*) NOT Title=(pain) NOT Title=(incontinence) NOT Title=(stroke)

Limits: Reviews, English, Dutch

### Assia

("comprehensive geriatric assessment") OR ("inpatient rehabilitation") OR ("geriatric management") OR ("geriatric management and evaluation") OR ("geriatric evaluation") OR ("geriatric service") OR ("geriatric care") OR ("acute care for elders") OR ("geriatric consultation") OR ("geriatric unit") OR ("geriatric units") OR ("geriatric assessment")

AND

(review OR "literature review" OR meta-analysis OR "meta analysis" OR "systematic review")

Limits: English, Dutch

### Psychinfo

("comprehensive geriatric assessment") OR ("inpatient rehabilitation") OR ("geriatric management") OR ("geriatric management and evaluation") OR ("geriatric evaluation") OR ("geriatric service") OR ("geriatric care") OR ("acute care for elders") OR ("geriatric consultation") OR ("geriatric unit") OR ("geriatric units") OR ("geriatric assessment")

Limits: English, Dutch, Literature review, systematic review, meta-analysis, 65 years and older.

## Appendix 2, Characteristics and conclusions of studies included in the systematic review

### Characteristics of meta-analyses

Author and date	Aim and search dates	Outcome measures	Inclusion criteria	Exclusion criteria	Included studies on ward-based CGA
<b>Ekdahl, et al. (2015)</b>	To review effects of CGA in frail and moderately frail patients compared to usual care in acute care settings. Up to 2015.	Discharge destination, ADL, readmission, cognition, depression, QoL, care-giver burden, mortality.	RCTs and observational studies with baseline description to allow group comparison. 65+.	None stated.	11 studies.
<b>Fox, et al. (2012)</b>	Compare effectiveness of ACE model with usual care. Search dates unclear.	Falls, pressure ulcers, delirium, functional decline, LOS, discharge destination, costs, hospital readmission.	Published and unpublished studies, RCT and quasi randomised trials with parallel controls comparing acute geriatric care with usual care for older adults of 65+ in acute illness or injury phase. Unit should	Studies not in English or French. Studies involving individuals receiving elective surgical procedures or palliative care, including social admissions, or with historical control groups.	13 studies.



			include at least one of five ACE components.		
<b>Ellis, et al. (2011)</b>	Evaluate effectiveness of CGA for older people admitted as emergency. 1966 to 2010.	Living at home, death, residential care, dependence, death or deterioration, ADL, cognition, readmission, LOS, use of resources.	RCT's comparing CGA care with usual care, 65+, emergency admissions.	Studies of organised care for specific conditions, those not evaluating CGA in an inpatient setting.	15 studies.
<b>Bachmann, et al. (2010)</b>	Assess effects of inpatient rehabilitation compared with usual care. 1970-2008.	Functional status, admissions to nursing homes, mortality.	RCTs on the effects of inpatients rehabilitation specifically designed for geriatric patients, age limit of 55+.	Studies which are not peer reviewed RCT's, interventions that were part of an acute care programme without rehabilitation in medically stable patients, interventions without therapy, studies with a control group not receiving usual care.	17 studies.
<b>Van Craen, et al. (2010)</b>	Examine how GEMUs are organised and the effectiveness of	Mortality, institutionalisation, functional decline, readmission, LOS.	Prospective controlled trials (RCT, and controlled trial with parallel controls), inpatients, 65+, hospitalization for at least 48 hours, GEMU as primary intervention.	Those not published in English, Dutch, French, those describing single disease management models (cancer dementia etc.) and IGCS.	7 studies (13 articles).

	admission on GEMUs. Up to 2007.				
<b>Báztan, et al. (2009)</b>	Assess effectiveness of acute geriatric units with usual care. Up to 2008.	Functional decline, living at home, mortality, LOS, costs, readmissions.	RCT, non-RCT, case control studies comparing acute geriatric units with conventional hospital units for patient with acute medical disorders, 65+.	Those not published in English or Spanish, secondary analyses, interventions aimed at specific medical disorders or surgical process, studies assessing care lasting beyond acute care, and those with patients admitted to the intervention unit $\geq$ three days after hospital admission.	11 studies.
<b>Evans, et al. (1995)</b>	Review effectiveness of rehabilitation programs compared with medical care. 1974-1994.	Survival, functional ability, discharge location.	Trial investigating effects of a multidisciplinary program of physical rehabilitation, focusing on improving physical function of people who had a physically disabling disorder, comparing at least one intervention group with one control group receiving usual care, quantitative analysis providing sufficient detail for interpretation.	Studies with single or limited treatments.	22 studies (12 articles).

<b>Stuck, et al. (1993)</b>	Evaluating the effects of CGA programs. Search dates unclear.	Mortality, living at home, hospital admission, physical function, cognition.	Studies focusing on CGA programs including GEMU, IGCS, Home assessment and outpatient assessment.	Unspecified predetermined criteria.	6 studies.
<b>Rubenstein, et al. (1991)</b>	Reviewing effectiveness of GEMUs. Search dates unclear.	Mortality.	Studies with concurrent control groups.	Those not providing mortality data or only mortality data at discharge, Or with uneven or uncombinable intervals of follow-up. Studies in which intervention group failed to receive intervention.	4 studies.

**Outcomes of six most recent meta-analyses.**

<u>Author/ Year/Setting</u>	Statistically significant outcomes benefitting the intervention group in comparison to control group	Statistically non-significant outcomes
<b>Ekdahl, et al./ 2015/ Hospital frail patients</b>	Change in housing: RR 1.17, 1.07 to 1.28, p=0.0005, N=1060 Personal ADL: SMD 0.21, 0.05 to 0.37, p=0.01, N=977 Depression: SMD -0.17, -0.32 to -0.03, p=0.02, N=748	Instrumental ADL: SMD 0.01, -0.14 to 0.16, p=0.89, N=729 Readmission: RR 1.27, 0.93 to 1.73, p=0.14, N=1028 Cognition: SMD -0.06, -0.020 to 0.07, p=0.35, N=820 QoL: SMD -0.08, -0.58 to 0.43, p=0.76, N=178 Mortality: RR 1.09, 0.99 to 1.21, p=0.09, N=1184
<b>Hospital moderately frail patients</b>	None to report.	Change in housing: RR 1.07, 0.99, 1.14, p=0.07, N=2876 Personal ADL: SMD 0.06, -0.04 to 0.15, p=0.25, N=4557 Instrumental ADL: SMD 0.00, -0.11 to 0.11, p=1.00, N=1388 QoL: SMD 0.05, -0.05 to 0.16, p=0.32, N=1347 Mortality: RR 1.01, 0.98 to 1.04, p=0.48, N=4114
<b>Fox, et al./ 2012/ ACE units</b>	Falls: RR 0.51, 0.29 to 0.88, p=0.02, N=749 Delirium: RR 0.73, 0.61 to 0.88, p=<0.001, N=1154 Functional decline between status 2 weeks before hospital admission and discharge: RR 0.87, 0.78 to 0.97, p=0.01, N=4485	Pressure ulcers: RR 0.49, 0.23 to 1.04, p=0.06, N=749 Functional decline between admission and discharge for which one study removed that proved heterogeneous: RR 0.92, 0.75 to 1.13, p= 0.41, N=3717 Mortality: RR 1.01, 0.81 to 1.27, p=0.90, N=6612 Hospital readmissions: RR 1.05, 0.92 to 1.18, P=0.49, N=3983

	<p>LOS (heterogeneous studies removed): RR -0.61, -1.16 to -0.05, p=0.03, N=3956</p> <p>Discharge destination home: RR 1.05, 1.01 to 1.10, p=0.01, N=4315</p> <p>Discharge destination nursing home (heterogeneous studies removed): RR 0.82, 0.68 to 0.99, p=0.04, N=2040</p> <p>Costs (heterogeneous studies removed): WMD -245.80, -446.23 to -45.38, p=0.02, N=4226</p>	
<b>Ellis, et al./ 2011/ Hospital</b>	<p>Living at home at 6 months follow-up*: OR 1.31, 1.15 to 1.49, p=&lt;0.001, N=4624</p> <p>Living at home at 12 months follow-up*: OR 1.22, 1.10 to 1.35, p=&lt;0.001, N=6290</p> <p>Living in residential care at 12 months follow-up*: OR 0.73, 0.64 to 0.84, p=&lt;0.001, N=6252</p> <p>Death or deterioration^: OR 0.76, 0.64 to 0.90, p=0.001, N=2622</p> <p>Cognitive function^: SMD 0.08, 0.01 to 0.15, p=0.002, N= 375</p>	<p>Mortality at 6 months^: OR 0.91, 0.80 to 1.05, p=0.20, N=6787</p> <p>Mortality at 12 months^: OR 0.99, 0.90 to 1.09, P=0.82, N=9963</p> <p>Dependence*: OR 0.94, 0.81 to 1.10, p=0.44, N=4128</p> <p>Death or dependence+: OR 0.98, 0.77 to 1.25, p=0.87, N=1212</p> <p>Re-admission+: OR 1.03, 0.89 to 1.18, P=0.72, N=3822</p> <p>ADL+: SMD 0.06, -0.06 to 0.17, p=0.33, N=1296</p> <p>Length of stay: Not done due to heterogeneity</p> <p>Costs: Not done due to different outcome measures used</p>
<b>Bachmann, et al./</b>	None to report	Functional improvement at discharge: OR 1.34, 1.12 to 1.60, p=0.821, N=1918

<b>2010/ Rehabilitation</b>		<p>Functional improvement 3-12 months follow-up: OR 1.02, 0.86 to 1.21, p=0.949, N=2722</p> <p>Admission to nursing homes at discharge: RR 0.53, 0.33 to 0.86, p=0.190, N=572</p> <p>Admission to nursing home at 3-12 months follow-up: RR 0.90, 0.71 to 1.13, p=0.106, N=2887</p> <p>Mortality at discharge: RR 0.76, 0.54 to 1.06, p=0.418, N=867</p> <p>Mortality at 3-12 months follow-up : RR 0.88, 0.75 to 1.04, p=0.245, N=2887</p>
<b>Van Craen, et al./ 2010/ GEMU</b>	<p>Functional decline at discharge: RR 0.87, 0.77 to 0.99, p= 0.04, N=2305</p> <p>Institutionalization at 12 months follow-up: RR 0.78, 0.66-0.92, p=0.003, N=4492</p>	<p>Functional decline at 12 months follow-up: RR 0.84, 0.69-1.03, p=0.09, N=2305</p> <p>Mortality at 3 months follow-up: RR 0.78, 0.59 to 1.04, p=0.10, N=2436</p> <p>Mortality at 6 months follow-up: RR 0.82, 0.56 to 1.18, p=0.28, N=1785</p> <p>Mortality at 12 months follow-up: RR 0.97, 0.88 to 1.08, p=0.61, N=3108</p> <p>Readmission at 12 months follow-up: RR 0.85, 0.65 to 1.11, p=0.22, N=668</p>

		Length of stay: EH 0.07, -0.11 to 0.26, p=0.46, N=3759 Institutionalization at 3 months follow-up: RR 0.90, 0.66 to 1.23, P=0.52, N=2436 Institutionalization at 6 months follow-up: RR 0.92, 0.68 to 1.25, P=0.61, N=1785
<b>Báztan, et al./ 2009/ Geriatric Units</b>	Functional decline at discharge: OR 0.82, 0.68 to 0.99, p=0.04, N=648  Living at home after discharge: OR 1.30, 1.11 to 1.52, p=0.001, N=2632  Costs for the acute care units : CMD -0.31, -0.52 to -0.09, p=not given but stated as significant, N=2314	Functional decline at three months follow-up: Data could not be analysed, however all four studies stated no differences found between IG and CG  Living at home at 3 months follow-up: OR 1.16, 0.99 to 1.37, p=0.07, N=1964  Mortality at discharge: OR 0.83, 0.60 to 1.14, p=0.25, N=3582  Mortality at three months follow-up: OR 0.95, 0.78 to 1.16, p=0.61, N=2862  Readmission at discharge and at three months follow-up: Analysis and outcomes unclear/incomplete description  Length of stay: Not done due to heterogeneity

RR: Relative Risk, WMD: Weighted Mean Difference, OR: Odds Ratio, SMD: Standardised Mean Difference, CMD: Combined Mean Difference, EH: Estimated Hedges' gu, IG: Intervention Group, CG: Control Group, \*analysis involved wards only, ^analysis involved wards and teams, showing no differences in the sub analyses, +unclear whether analysis involved wards or teams or both.

## Reviews of the literature, characteristics and conclusions

Author and date	Aim and search dates	Outcome measures	Inclusion criteria	Exclusion criteria	Included number of articles	Conclusions
<b>Pilotto, et al. (2017)</b>	To review evidence around CGA programs, to analyse the benefits in a variety of settings and clinical conditions. Up to 2016.	Mortality, discharge destinations, readmissions, ADL, costs, functional status, QoL.	RCTs, observational clinical studies, systematic reviews and meta-analyses on the use of CGA.	Letters to editors and single case studies. Studies in which the mean age of patients was <60. Studies not in English	14 articles based on hospital CGA, of which 13 focused on ward-based CGA.	Presenting findings per study, most of which are original studies, reviews or meta-analyses included in this review as well. Author focuses on documenting benefits, presenting trends towards positive effects on the outcome measures.
<b>Kosse, et al. (2013)</b>	Investigate effect of early physical rehabilitation programs. Up to 2013.	Physical functioning, LOS, discharge destination.	RCT's, English, older patients of $\geq 65$ , interventions needed to include physical exercise with a physical functioning outcome measure.	Patients requiring treatment on specialised unit other than acute geriatric unit. Interventions aimed at a specific	15 articles (13 studies).	Early physical rehabilitation programs have a positive effect on physical functioning, LOS, and decrease discharges to nursing homes.



				disorder or surgical process.		
<b>Fox, et al. (2013)</b>	To describe model components of ACE and explore their association with outcome measures. Search dates unclear.	Iatrogenic complications, functional decline, LOS, discharge destination, costs.	Published and unpublished studies, RCT or quasi randomised trials with parallel controls comparing acute geriatric care with usual care for older adults of 65+ in acute illness or injury phase. Unit should include at least one of five ACE components.	Studies not in English or French. Studies involving individuals receiving elective surgical procedures or palliative care, including social admissions, or with historical control groups.	32 articles (of which 14 trails).	The components of medical review, early rehabilitation, and patient-centred care are important to improve patient outcomes.
<b>Linertova, et al. (2011)</b>	To identify interventions reducing readmission in people of ≥75, and to assess role of home follow-up. Up to 2009.	Readmission.	RCTs, and non-randomized controlled trails. The intervention had to be done during admission or follow-up to reduce hospital re admission.	Studies not in English or Spanish, studies where half of the patients were <75, or where average age was <75.	32 studies (17 studies on in-hospital interventions).	In-hospital interventions had no effect on re-admissions.

<b>Totten, et al. (2011)</b>	(Sub aim): To evaluate effect of inpatient geriatric units using CGA. 1985-2012.	Functional decline, mortality, readmissions, nursing home admissions.	Published and indexed studies, interventions include geriatrician and inpatient or outpatient medical care. Systematic reviews had to provide sufficient information for interpretation. Intervention had to be compared to a comparator.	Studies not in English. Studies including long-term care and integrated long-term and acute care.	6 reviews of original studies.	Geriatric units increase function at discharge and discharge home compared to usual care. Evidence on other outcomes insufficient to conclude.
<b>Bakker, et al. (2011)</b>	Review evidence for hospital-wide interventions to improve care for frail older people. 1980-2009.	Functional decline, mortality, LOS, discharge destination, resource use, readmission, complications, costs.	RCTs, or controlled clinical trials, controlled before-after studies, or interrupted time series. 65+. Organisational intervention to improve hospital wide quality, safety or effectiveness of care for frail older people.	Medical specialty, disease or disability specific interventions, pre- or post- hospital interventions, specialized hospitals, single component interventions.	20 articles (17 studies)	Interventions were found to have no or a small positive effect on patient outcomes.

<b>Steele (2010)</b>	Examining the current evidence on models of care for hospitalised older people. No time limit.	ADL, costs, discharge destination, patient satisfaction, professionals' satisfaction,	Primary research reports on ACE, HELP, or NICHE models.	Studies not in English.	13 articles (6 focusing on ACE).	The included studies on ACE units showed positive effects on the outcome measures.
<b>Ahmed and Pearce (2010)</b>	Evaluate effects of ACE units for hospitalised older people. 1990-2008.	LOS, costs, readmission, nursing home admission, functional decline, delirium, poly-pharmacy, patient/provider satisfaction.	Acute hospital care on ACE units or ACE and general medicine wards. All study designs. Patient of 65+.	Studies not in English	20 articles.	Results from the included studies have been primarily positive in relation to the outcome measures included.
<b>Hickman, et al. (2007)</b>	Reviewing evidence describing elements of interventions to	Focus on summarising key elements of effective interventions.	Randomized controlled trials, case-controlled studies. Studies from emergency department to	Descriptive studies, studies not in English.	26 studies (focusing on medical wards and	Key elements of effective interventions were delivery by clinicians specialising in gerontology, and in specifically designed settings.

	manage older people in acute care. 1985-2006.		discharge were included, 65+		geriatric units)	
<b>Kamel, Jarrett and MacDonald (2005)</b>	Examine effectiveness of GEMUs in managing frail older people. Search dates unclear.	Functional status, QoL, mortality, admission to long-term care, cognition, mobility, costs.	RCTs, written in English.	Focus on specific health problems.	3 studies.	The evidence regarding the functional status and survival is inconclusive. GEMUs seem to result in increased perceived QoL, delay nursing home admission, and appear cost neutral compared to usual care.
<b>Cordato, Saha and Price (2005)</b>	Examining current data on geriatric interventions. Search dates unclear.	Functional status, QoL, avoidance or delay of nursing home admissions.	RCTs on GEM interventions compared with usual care.	None stated	13 Studies	Findings show consistent positive effects for the included outcome measures.
<b>Ellis and Langhorne (2004)</b>	To examine effect of CGAs Search dates unclear.	Mortality, living at home, physical	RCTs, focus on general CGA in at-risk population, focus on GEMUs and IGCS	Studies focusing on condition-specific care.	20 studies (10 studies focusing on GEMUs)	Benefit was found for ward-based CGA on GEMUs in relation to patient living at home in long-term. No effects found on mortality.

		function, cognition.				
<b>Day and Rasmussen (2004)</b>	Review effectiveness of specialist geriatric services. Sub-aim focuses on inpatient geriatric services. 1980-2003.	Functional status, health status, mortality, LOS, readmission, discharge home, discharge to residential care.	Studies identifying key components of specialist geriatric services, 65+, people with multiple, changing and complex morbidities and at risk of functional decline. Systematic reviews, meta-analyses, RCTs, controlled clinical trials, cohort studies, case control studies, comparative studies, quasi-experimental studies, descriptive studies.	Studies on long-term residential care without assessment or rehabilitation, peripatetic condition-specific team services on general wards. Studies with < 50 persons included, follow-up period of ≤3 months, studies with significant methodological problems.	25 studies (focusing on sub-aim)	Provides overview of outcomes by studies such as Stuck et al. (1993), Scott (1999), Evans et al. (1995). CGA programs showed overall benefit compared to usual care. Positive results were also found for GEM/GEMUs.
<b>Wieland (2003)</b>	To evaluate effectiveness and costs of GEMUs. 1990-2002.	Mortality, functional status, LOS, nursing home placement,	Studies in which CGA is a core problem-defining and care-planning process, 65+. Literature reviews,	None stated.	Studies on general effects unclear. 20 studies	CGA-based interventions seem to have some effect on functional and health outcomes. Most studies looking at costs of CGA-based interventions

		discharge home, costs.	experimental or quasi-experimental design.		regarding costs.	suggest it can be effective without raising total care costs.
<b>Parker, et al. (2000)</b>	To evaluate costs, quality and effectiveness of locations of the care of older people. 1988-1999.	Mortality, LOS, readmission, physical function, cognition, costs, patient satisfaction, QoL, impact of family/carers, destination outcome.	Randomised or pseudo-randomised trials, with a clear comparison of location of care. Systematic reviews in this area also included.	None stated.	84 articles (45 trials). (11 focusing on geriatric units and ACE units)	Evidence about effectiveness and costs of different forms of the care of older people is weak. Few significant differences were found regarding the included outcome measures.
<b>Luk, Or and Woo (2000)</b>	To review concept and components of CGA, and review evidence on its benefits.	Diagnostic accuracy, discharge destination, function, cognition, medication use, use of home	None stated.	None stated.	13 studies (8 focusing on in-patient CGA).	Some studies showed positive effects of CGA on, for instance, functional status and medication use. However, other studies did not find these effects.

		health services, use of medical services, costs, mortality.				
<b>Scott (1999)</b>	To appraise evidence of efficacy for current models of geriatric care. 1984-1998.	Mortality at one year, living at home at one year, physical function.	Randomised trials, or systematic reviews on these trials, of specific geriatric assessment/management strategies. Included non- randomised studies only when useful for economic or organisational aspects. Well-defined interventions, outcome measures and population. 65+. ≥75% patient follow-up. Analysis on intention-to-treat basis.	Studies not written in English.	26 studies (7 focusing on acute geriatric unit or GEMUs)	Studies focusing on acute geriatric units did not find an effect on the included outcome measures. Studies focusing on GEMUs did find positive results for these.
<b>Quartararo (1996)</b>	To assess the effect of CGA on nursing	Nursing home admissions at discharge, 4-6 months follow	RCTs, or quasi experimental studies found through Medline.	Descriptive studies, studies focusing on consultative geriatric assessment.	10 studies (6 focusing on ward	Studies focusing on ward-based CGA mostly present reduction in nursing home admissions although results suggest a short-term effect.

	home admissions. 1966 to ?	up, 12 months follow up.			based CGA)	
<b>Cole (1991)</b>	Determine effectiveness of geriatric medical services. 1975-1990.	ADL, LOS, survival, physical status, cognition, use of services, continence and disposition, self-maintenance.	English or French. Randomized and non-randomized controlled trials of a geriatric medical service.	Studies focusing on administrative structures, homes services and care settings. Studies with unaccounted for enrolled patients at follow-up.	15 studies (4 focusing on hospital units)	Hospital units result in reducing LOS and mortality rates.
<b>Applegate, et al. (1991)</b>	Review evidence for efficacy of GEMUs. Search dates unclear.	Discharge to nursing home, LOS, mortality.	RCTs.	None stated	2 (focusing on inpatient ward-based geriatric assessment t)	Care provided on GEMUs, compared to usual care, showed less admission to nursing homes. Positive results regarding mortality and LOS cannot be fully linked to the intervention of GEMU care.



<b>Rubenstein, et al. (1991)</b>	Reviewing effectiveness of GEM programs. Search dates unclear.	Diagnostic accuracy, discharge destination, functional status, psychological status, use of prescribed drugs, survival, long-term utilisation and costs.	Controlled and descriptive studies.	None stated.	22 studies (13 focusing on inpatient GEMUs)	Most studies around effectiveness of GEM programs report positive results regarding the outcomes measures included.
----------------------------------	--	--	-------------------------------------	--------------	---	---

# Quality review of the included meta- analyses

	Is the review based on a focused question that is adequately formulated and described	Were eligibility criteria for included and excluded studies predefined and specified	Did the literature search strategy use a comprehensive, systematic approach	Were titles, abstracts, and full-text articles dually and independently reviewed for inclusion/exclusion	Was the quality of included studies rated independently by two or more reviewers using a standard method to appraise internal validity	Were the included studies listed along with important characteristics and results of each study	Was publication bias assessed	Was heterogeneity assessed	Overall quality rating (Good, fair, poor) #
Ekdahl, et al. (2015)	Y	Y	Y	Y	Y	Y	Not reported	Y	Good
Fox, et al. (2012)	Y	Y	Y	Y	Y	Y	Not reported	Y	Good
Ellis, et al. (2011)	Y	Y	Y	Y	Y	Y	Not reported	Y	Good
Bachmann, et al. (2010)	Y	Y	Y	Y	Y	Y	Not reported	Y	Good
Van Craen, et al. (2010)	Y	Y	Y	Not reported	Y	Y	Y (only aimed to look for unpublished literature)	N (mentioned only, no tests done)	Fair
Báztan, et al. (2009)	Y	Y	Y	Y	Y	Y	Y (test done)	Y	Good
Evans, et al. (1995)	Y	Y	Y	Not reported	Y	N	N	Y (stating that tests are done, but no statistical	Fair

								outcomes given	
<b>Stuck, et al. (1993)</b>	N (unclearly reported)	N (unclearly reported)	Y	Y	Not reported	Y	Y (aimed to look for unpublished literature)	Y	Fair
<b>Rubenstein, et al. (1991)</b>	Y	N (incomplete)	Nor reported	Not reported	Not reported	N	N	N	Poor

Y = yes

N = no

# Good = at least 7 Ys, Fair = 5 or 6 Ys, Poor = 4 or less Ys

### Quality review of the included systematic and literature reviews

	Systematic review (SR) or literature review (LR)	Is the review based on a focused question that is	Were eligibility criteria for included and excluded studies predefined and specified	Did the literature search strategy use a comprehensive, systematic approach	Were titles, abstracts, and full-text articles dually and independently for inclusion/exclusion	Was the quality of included studies rated independently by two or more reviewers using a standard method to	Were the included studies listed along with important characteristics and results of each study	Was publication bias assessed	Overall quality rating (good, fair, poor) *
<b>Pilotto, et al. (2017)</b>	LR	Y	Y	Y	Not reported	Not reported	Y	N	Fair
<b>Kosse, et al. (2013)</b>	SR	Y	Y	Y	Y	Y	Y	N	Good
<b>Fox, et al. (2013)</b>	SR	Y	Y	Y	Y	Y	Y	N	Good
<b>Linertova, et al. (2011)</b>	SR	Y	Y	Y	Y	Y	Y	Y (mentioned as limitation)	Good
<b>Totten, et al. (2011)</b>	Evidence-based synthesis program for Department of Veterans Affairs	Y	Y	Y	Not reported	Not reported	Y	N	Fair
<b>Bakker, et al. (2011)</b>	SR	Y	Y	Y	Y	Y	Y	N	Good

<b>Steele (2010)</b>	LR	Y	Y	Y	Not reported	Not reported	Y	N	Fair
<b>Ahmed and Pearce (2010)</b>	LR	Y	Y	Y	Not reported	Not reported	Y	Y (mentioned as limitation)	Fair
<b>Hickman, et al. (2007)</b>	LR	Y	Y	Y	Y	Y	Y	Y (only searched for unpublished literature)	Good
<b>Kamel, Jarrett and MacDonald (2005)</b>	LR	Y	Y (although could have been more clearly reported)	Y	Not reported	Not reported	Y (although limited information presented)	N	Poor (due to limited information)
<b>Cordato, Saha and Price (2005)</b>	LR	Y	Not reported	Not reported	Not reported	Not reported	N	N	Poor
<b>Ellis and Langhorne (2004)</b>	SR	Y	Y	Y	Not reported	Not reported	Y	N	Fair
<b>Day and Rasmussen (2004)</b>	Critical critique commissioned by Ministry of Health	Y	Y	Y	Not reported	Y	Y	Y (mentioned as limitation)	Good
<b>Wieland (2003)</b>	LR first section, SR second section	Y	Y	Y	Not reported	Not reported	Y (for SR)	N	Fair

<b>Parker, et al. (2000)</b>	SR	Y	Y	Limited information, referred to other publication which I cannot find	Not reported in this publication, refer to other publication	Not reported in this publication, refer to other publication	Y (limited information in a number of tables)	N	Unable to fully assess
<b>Luk, Or and Woo (2000)</b>	LR	Y	N	Not reported	Not reported	Not reported	N	N	Poor
<b>Scott (1999)</b>	LR	Y	Y	N (only Medline)	Not reported	Not reported	Y (some of included studies, not all)	N	Poor
<b>Quartararo (1996)</b>	LR	Y	Y	N (only Medline)	Not reported	Not reported	Y	N	Poor
<b>Cole (1991)</b>	LR	Y	Y	Y	N	N	Y	N	Fair
<b>Applegate, et al. (1991)</b>	LR	Y	Not reported	Not reported	Not reported	Not reported	N	N	Poor

Y = yes

N = no

LR = Literature review

SR = Systematic review

\*Good = at least 6 Ys, Fair = 4 or 5 Ys, Poor = 3 or less Ys

## Appendix 3, Interview prompts

Indicative interview prompts
Patient

Please, can you tell me what has happened to you since you first arrived on the ward?

Who have you talked to about your care? Can you tell me what they said or did?

Is there someone you haven't seen yet but would like to speak to?

Is there anything you feel you need but haven't had?

### Prompts to be used with each question as appropriate

How do you feel about that?

What do you think about that?

Can you tell me a bit more about this?

Can you tell me what they said or did?

How was that different from/same as...?

What was helpful about that?

What was unhelpful about that?

What would you have liked to happen?

Professional
--------------

Please can you tell me about your experience of assessing patients on this ward?

(Exploratory questions will follow up on the leads they provide and will explore areas such as, the type of care they provide, type of information they gather, type of information they value, different ways of gathering information, how they make decisions, factors that influence their decisions, how they record assessments/communicate to others, what the

challenges are, and what they would like to develop or change in relation to the assessment process.)

Prompts to be used with each question as appropriate

How do you feel about that?

What do you think about that?

Can you tell me a bit more about this?

Can you tell me what they said or did?

How was that different from/same as...?

What was helpful about that?

What was unhelpful about that?

What would you have liked to happen?



## Appendix 4, Document for focus group discussing preliminary findings

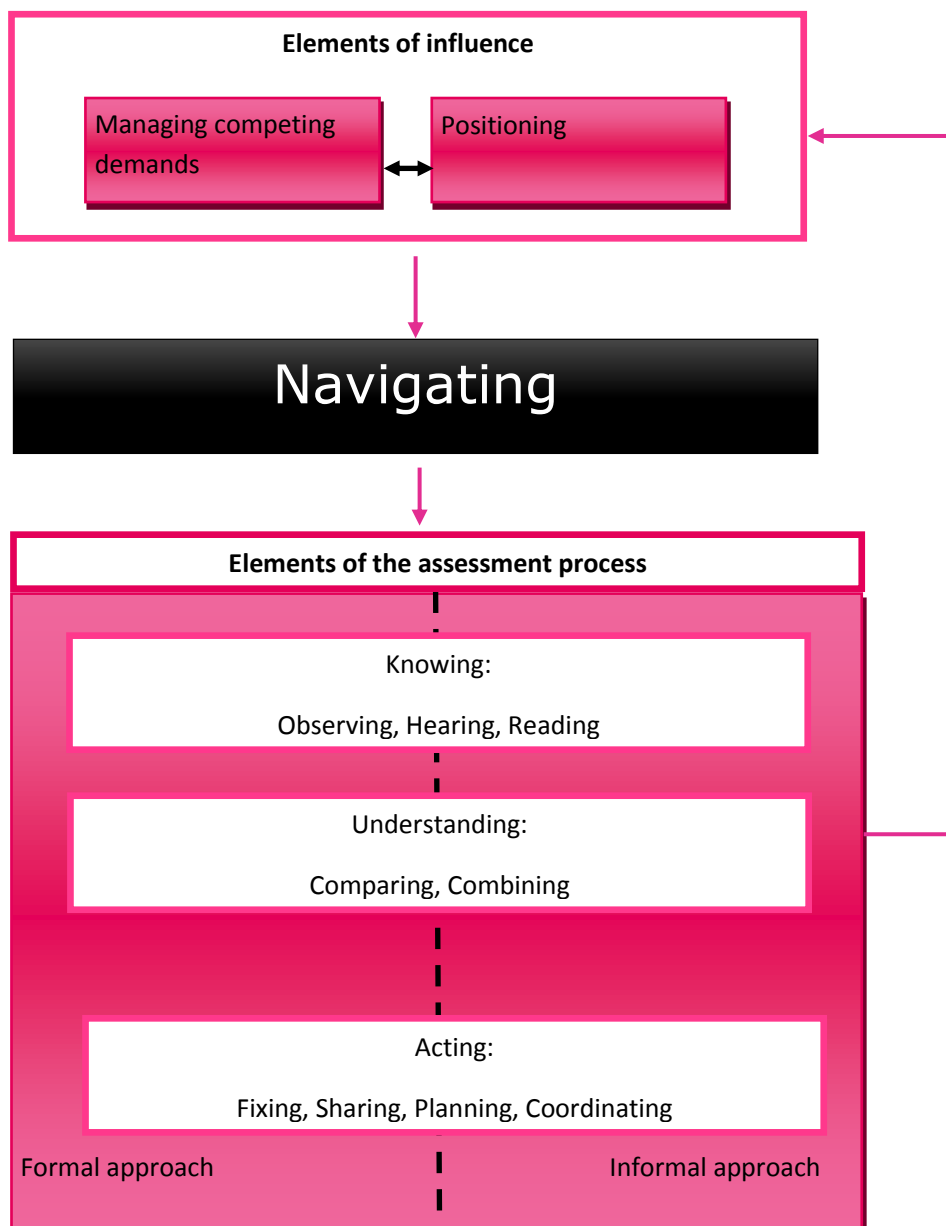
### Focus group health care professionals

#### Aims

Aim of the study: Exploring the assessment process on a ward for older people.

Aim of the focus group: To talk about the preliminary findings.

#### Preliminary findings; an overview



Assessment: *“Taking in all the information that you have got about a patient, or a situation, and working out what to do.”*

This means assessment processes are complex and include many activities woven into and influenced by the culture of the ward. There are three steps: gaining knowledge, combining knowledge, acting on knowledge:

- Gaining knowledge is through observing, hearing and reading.
- Combining knowledge means putting the knowledge you have about the patient with for instance academic knowledge of how having a high temperature, a low BP, and a high pulse are signs of sepsis.
- Acting on knowledge is done in different ways: fixing, sharing, planning, and/or coordinating.

Formal process: *“When the patient arrives we will do their observations first. Then we normally check their skin and document it. And then I will start the admission paperwork.”*

Informal process: *“Say if I have been in the same area for a couple of days and I come back in and they look different, like they look clammy, they look skinnier, I would just say ‘she looks a bit grey today’.”*

### **Core category: Navigating**

This is about which route and what kind of assessment process a professional chooses to take at each given moment, and this process is influenced by the five elements of influence.

### **Category: Managing competing demands**

*“They have so many competing demands.”*

Such as:

*“You feel you have got to prove yourself.”*

*“If you haven’t documented it you haven’t done it, it is your evidence.”*

*"They are do caring, they treat you as if you are their mother, or their grandma, a member of their family."*

-

Prioritising: *"But you see, time is something that everybody lacks these days. Because you cannot do everything for all of them all the time. But we try to do what is more important."*

Separating: *"Everything seems to be in a separate little box."*

**Category: Positioning**

*"I think, this is not my body, well, it isn't for a few days now because it is theirs."*

*"You haven't got time to have a bit of a chat, it is like ships in the night."*

Hierarchy: *"I guess that is why the team is so important, especially the support workers, because you rely on them so much to sort of do the assessment as well."*

*"We can all just listen to each other in the board round and then we know where we are."*

**Discussion points (not to hand out to group but for Hanneke to use)**

1. Welcome
2. Thank you and confidentiality, no right/wrong, everyone is equal in this meeting, recording
3. Consent forms
4. Explain process using sailing analogy.
5. What do you think when you look at the model?
6. What do you think when you see 'Navigating'?
7. What are your thoughts on the informal and the formal process in your daily work routine?
8. Do your years of experience relate in any way to the formal process and the informal process of assessment?
9. What are your thoughts on the combination of knowledge section? Do you use other kinds of knowledge, if so can you explain this with an example?
10. What does prioritising mean to you? Are there activities you prioritise?

## Appendix 5, Document review

1. Date of review
2. Gender
3. Age
4. Main diagnosis
5. Length of admission on ward so far
6. Previous wards
7. Who is involved with patient's care
8. Nursing Cardex:
  - a. Risk assessments
  - b. Admission booklet
  - c. Nursing care plans (for each form: what is in it: what isn't in it, updated, info correct?)
9. Other documentation:
  - a. OT/PT
  - b. Medical notes by doctors
  - c. Discharge team
  - d. Others (for each form: what is in it: what isn't in it, updated, info correct?)
10. Duplication of assessment among professionals

### Added reminders throughout data collection:

Check for use of standard sentences

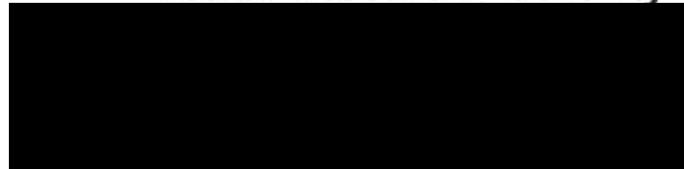
Check times of documentation

Compare plans from different disciplines: similarities and differences

## Appendix 6, Approval letter National Research Ethics Service



**Health Research Authority**



17 December 2014

Miss Hanneke Wiltjer



Dear Miss Wiltjer,

<b>Study title:</b>	<b>Understanding the assessment process on an inpatient ward for older people.</b>
<b>REC reference:</b>	<b>14/WM/1229</b>
<b>Protocol number:</b>	<b>HW129314</b>
<b>IRAS project ID:</b>	<b>164765</b>

Thank you for your letter of 16 December 2014. I can confirm the REC has received the documents listed below and that these comply with the approval conditions detailed in our letter dated 09 December 2014

### **Documents received**

The documents received were as follows:

<i>Document</i>	<i>Version</i>	<i>Date</i>
Copies of advertisement materials for research participants [Ward poster]	2	16 December 2014
IRAS Checklist XML [Checklist_17122014]		17 December 2014
Other [Cover letter revised documentation]		16 December 2014
Participant consent form [Informed consent patient]	3	16 December 2014
Participant consent form [Informed consent professional]	3	16 December 2014
Participant information sheet (PIS) [Patient information sheet]	3	16 December 2014
Participant information sheet (PIS) [Professional information sheet]	3	16 December 2014

## Approved documents

The final list of approved documentation for the study is therefore as follows:

Document	Version	Date
Copies of advertisement materials for research participants (Ward poster)	2	16 December 2014
Covering letter on headed paper (Cover letter)		03 November 2014
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) (Confirmation of insurance- liability)		
Interview schedules or topic guides for participants (Interview prompts)	2	
IRAS Checklist XML (Checklist_17122014)		17 December 2014
Letter from sponsor (Confirmation of Sponsorship)	1	03 November 2014
Other (Confirmation of insurance- professional indemnity)		04 August 2014
Other (Liz Tutton CV)		
Other (Document Review)	1	
Other (Cover letter revised documentation)		16 December 2014
Participant consent form (Informed consent patient)	3	16 December 2014
Participant consent form (Informed consent professional)	3	16 December 2014
Participant information sheet (PIS) (Patient information sheet)	3	16 December 2014
Participant information sheet (PIS) (Professional information sheet)	3	16 December 2014
REC Application Form (REC_Form_06112014)		06 November 2014
Referee's report or other scientific critique report (Upgrade report)		
Referee's report or other scientific critique report (Upgrade confirmation)		
Research protocol or project proposal (RD application)	2	
Summary CV for Chief Investigator (CI) (CV Hanneke Wilijer)		03 November 2014
Summary CV for supervisor (student research) (Kate Sears CV)		03 November 2014

You should ensure that the sponsor has a copy of the final documentation for the study. It is the sponsor's responsibility to ensure that the documentation is made available to R&D offices at all participating sites.

14/WM/1229

Please quote this number on all correspondence

Yours sincerely,




E-mail: [NRESCommittee.WestMidlands-CoventryandWarwick@nhs.net](mailto:NRESCommittee.WestMidlands-CoventryandWarwick@nhs.net)

Copy to:



## Appendix 7, Approval letter Research and Development



13 January 2015

Hanneke Wiltier

Dear Hanneke,

**Study Title: Understanding the assessment process on an inpatient ward for older people**  
**R&D no: HW129314**

Thank you for submitting the above study for consideration by the Research Development and Innovation Office. I am pleased to inform you that your study has been approved.

### Performance Data:

The Government wishes to see a dramatic and sustained improvement in the performance of providers of NHS services in initiating and delivering clinical research. The Trust is required to submit performance data to the NIHR on the 70 day benchmark (valid research application to first patient recruited) and the delivery of commercial contract trials to time and target.

You are requested to inform [RD&I@uhcw.nhs.uk](mailto:RD&I@uhcw.nhs.uk) of the date of first patient recruited.

Date of first patient recruited (70 day benchmark)*:	N/A
Recruitment target:	N/A
Agreed date (by which the last patient will be recruited):	N/A

\*Please note that that date of first patient recruited is the date that the first **eligible** patient was **consented** into the study, not the date the patient was randomised. Consented patients who then fail screening should not be counted.

### Approved Documents:

The documents approved for use in this study are:

Document	Version	Date
Protocol	2	03/11/2014
Ward Poster (Advertisement Materials)	2	16/12/2014
Interview prompts	2	-
Document review	1	-
Consent form (Patient)	3	16/12/2014
Consent form (Professional)	3	16/12/2014
Participant Information Sheet (Patient)	3	16/12/2014
Participant Information Sheet (Professional)	3	16/12/2014

**We Care. We Achieve. We Innovate.**

**Conditions of Approval**

- Should you wish to make any changes to the documents listed above, you must obtain R,D&I approval prior to use.
- Notification of any serious breaches of GCP or the trial protocol must be reported to the RD&I Department and a DATIX Clinical Adverse Event form completed within 24 hours of any suspected breach being identified and confirmed.

**Sponsorship & Indemnity**

**Non-Commercial (Not sponsored by the Trust)**

Your research sponsorship & Indemnity is provided by the University of Warwick.

**Standard Operating Procedures**

Current versions of all RD&I SOPs are available to view on the Trust intranet as follows:

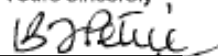
[http://webapps/intranet/departments/research\\_and\\_development/SOP's.asp](http://webapps/intranet/departments/research_and_development/SOP's.asp)

Your project may be subject to ad hoc audit by our department to ensure these standards are being met.

May I take this opportunity to remind you that, as a researcher, you must ensure that your research is conducted in a way that protects the dignity, rights, safety and well-being of participants. Trust RD&I Approval assumes that you have read and understand the Research Governance Framework and accept that your responsibilities as a researcher are to comply with it, the Data Protection and Health & Safety Acts.

The Trust wishes you every success with your project.

Yours sincerely



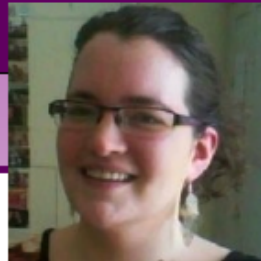
Research Governance Manager

cc

**We Care. We Achieve. We Innovate.**



## Exploring assessment



We are undertaking a study to explore assessment. We hope that the findings of this study will help improve our understanding of assessment of older people when they are admitted to hospital.

Hanneke will be on the ward to do some observation of care. She would also like to talk to you about what you think, and review some patient notes. If you have any questions please get in touch.

What:	An observational research study
Why:	Assessments are part of care for older people admitted to hospital. We would like to get your views on this.
Where:	[REDACTED]
By whom:	Hanneke Wiltjer, PhD-student of Nursing at Warwick University, Hanneke.wiltjer@warwick.ac.uk 024 76150618
Supervised by:	Prof. K. Seers and Dr. Liz Tutton

## Appendix 9, Information sheet for professionals

### Participant information sheet Professional

#### Understanding the assessment process on a ward for older people.

THE UNIVERSITY OF  
**WARWICK**

WARWICK MEDICAL  
SCHOOL

**NHS**

Date: 16-12-2014

Version Number: 3

We would like to invite you to take part in our research study. Joining this study is entirely up to you. Before you decide we would like you to understand why this research is being done and what it would involve for you. This study is led by Hanneke Wiltjer, who is conducting this study as part of her PhD in Nursing, and she will go through the information sheet with you. This will take approximately 15 minutes. Please do talk to others about this study if you wish.

The study aims to find out how older people are assessed in hospital. This involves the observation of the care you give, especially in regard to assessments. We would like to ask you about your views of assessment in an interview, review of patients' nursing and medical notes and undertake a focus group towards the end of the study. This will help us identify different views of assessment and challenges in undertaking assessment in hospital. It is possible for you to participate in all forms of data collection; however you may choose to participate in one or two of them, or you may choose not to participate.

The first part of the Participant Information Sheet tells you the purpose of the study and what will happen to you if you take part. Then we give you more detailed information about the conduct of the study.

Please do ask if anything is unclear

### **Participant information sheet**

#### **What is the purpose and background of the study?**

In this study we would like to understand how the process of assessment works for older people admitted to hospital. The assessment process includes all the questions and tests healthcare professionals do for and with admitted patients, in order to understand how to look after them. These questions create a picture of what kind of care and treatment a patient needs during admission to hospital. You have been invited to take part because you are a health care professional on this ward, and we are very interested to understand your experience of doing assessments.

#### **What would taking part involve?**

It is up to you to decide whether you would like to take part in this study. We will describe the study and go through this information sheet with you to give you all the information you need to make this decision. You may choose to take part in any or all of these activities:

- i) Observations of care,
- ii) Interviews about your experience,
- iii) Taking part in a focus group.

i) If you agree to observation the researcher will work alongside you and observe the processes you are involved in related to patient assessment. The researcher will normally be around for four hours at a time. If you are happy with this the researcher might ask you some questions during observation to clarify why, for instance, you ask the patient certain questions.

ii) The researcher may also ask you if you would be willing to take part in an interview about your experience of doing assessments. The place and time of the interview will be at your convenience. It will be digital audio recorded so that the researcher can remember what you said, and it could take up to an hour or as long as you feel comfortable. If you would prefer we could meet more than once just for a short time. It is possible for you to receive a copy of the transcribed interview.

iii) Towards the end of the study the researcher would like to do a focus group with healthcare professionals to discuss the findings up to that point and to further discuss the assessment process. This discussion will also be digital audio recorded.

Your involvement with the research study will end after the activities you agreed to take part in have taken place. If you would like a summary of what we have learnt as a result of the study, we are happy to send you this. This may be a couple of years after you have been seen, as we are seeing people over an eighteen month period.

All information that is collected about you will be kept strictly confidential and it will be stored securely at the University of Warwick. Your name will not be used and instead you will be given a study number, which means the information gathered will be confidential and you will not be individually identified. No one other than the research team will be able to link the research data to you personally. If you have provided us with personal data this will be destroyed when the study has finished. The data and the consent forms will be destroyed 10 years after the end of the study.

You are free to withdraw from the study at any time without having to give a reason. Your withdrawal will not affect your position on the ward.

#### **What are the possible benefits of taking part?**

You may find talking about your work helpful. We hope that the findings of this study will help improve our understanding of assessment of older people when they are admitted to hospital.

#### **What are the possible disadvantages and risks of taking part?**

We are not expecting any disadvantages of taking part. If you find us looking at or talking about your work upsetting, we will stop. You can decide whether you would like to continue after a break or choose another time if you wish to continue. If you do not wish to continue this is alright and this will not influence your position on this ward or in your team.

The information you give us will be made anonymous, and only the research team will have access to your personal details. However, in some cases auditors or inspectors might need to see your personal data if they want to ensure the correctness of the study.

#### **Expenses and payments**

If needed parking expenses will be paid.

#### **How will participation impact on my insurance?**

Your participation will not impact on your insurance.

#### **What is generic consent?**

If you agree to it, it is possible that the data you give us might be shared in the future with other researchers who are interested in its content. If data is

shared this will only be the anonymised data, which means it will not include your personal details.

### **Participant information sheet- supporting information**

#### **What if something goes wrong?**

If you have concerns about any aspects of this study, you should ask to speak to the researchers, who will do their best to answer your questions and concerns (024 76150618). If you remain unhappy or have a complaint about how you have been treated during the study, you can log this by contacting the Director of Delivery Assurance. Contact details are at the end of this information sheet.

If you suffer an injury due to participating in this study, the University of Warwick, who acts as a sponsor for this study, has indemnity arrangements in place, and you can contact Mrs Jane Prewett (024 76522746).

If you would like to raise a complaint regarding patient care given by the researcher please do so via your manager or by filling in an incident form on the hospital's intranet.

#### **What will happen if I don't want to carry on with the study?**

At any time during the study you are able to withdraw from the study. To withdraw you can speak to Hanneke Wiltjer directly, or you can inform your manager, who will pass your message on. Withdrawal from the study will not have any consequences for your position on this ward or in your team.

#### **Will my information be kept confidential?**

All the information you give us will be kept strictly confidential. In part one of this information sheet it has been explained how the information you give us will be made anonymous. All the information you give us, data and/or personal information, will be stored securely at the University of Warwick. Your personal details will be destroyed at the end of the study, and the anonymous data and the consent forms will be destroyed ten years after the end of this study.

Only the research team, including Hanneke Wiltjer and her supervisors at the University of Warwick, will have access to your personal details and to the anonymous data. If regulatory bodies or the NHS Trust want to do an audit to ensure the correctness of the study they too will have access to personal details. If, with your permission, data will be shared with other researchers in the future this will only include the anonymous data and not any personal details.

If participants or others show possible harm to themselves or others during the course of the study, we might have to breach confidentiality to protect the participant or others. If during data collection, it becomes clear there is a persistent problem in clinical practice, we will suggest you discuss the issue with a senior colleague on the team. We will undertake the responsibilities of disclosure within the principles outlined by the Nursing and Midwifery Council (NMC 2008). If we encounter care that requires immediate action we will take appropriate steps to ensure patient safety.

All procedures for handling, processing, storing, and destroying data are according to appropriate legislation, such as the Caldicott Principles and the Data Protection Act.

#### **What will happen to the results of the research study?**

The results of the study will be written up and published in a health related journal and at health related conferences. In these publications the researcher may use quotations from participants, but she will make sure these quotes cannot be linked to individual people. We will also talk to the staff about the study so that they can use the findings as part of their practice development. It is possible for you to receive a summary of the findings by filling in your contact details at the end of the consent form. At the end of the study the researcher will email or post this summary to you using the personal details you provided, after which your personal details will be destroyed. If you do not wish to receive such a summary you do not have to give your personal details to the researcher.

#### **Who is organising and funding the research?**

This study is conducted by Hanneke Wiltjer, PhD-student at the University of Warwick. She is supervised by Prof. Kate Seers and Dr. Liz Tutton.

#### **How have patients and the public been involved in this study?**

Members of a patient group have provided feedback on the study while it was still in the developing stages. AgeUK will be involved in spreading the findings of the study.

#### **Who has reviewed the study?**

Before we started, this study has been reviewed by the National Research Ethics Service West Midlands- Coventry and Warwickshire, who make sure that the research is fair.

#### **Consent process**

If you agree to take part, we will ask you to sign a consent form. You are free to withdraw from the study at any time without having to give a reason.

Your withdrawal will not affect your position on the ward. We will give you a copy of the signed consent form, and we will keep the original in a locked cabinet at the University of Warwick. This document will be destroyed ten years after the end of this study.

**What if relevant new information becomes available?**

If relevant new information becomes available that changes the need or the content of our study we will adapt our research accordingly. We will inform you of this during a ward meeting or through informal chats.

**Involvement of the General Practitioner/ Family Doctor (GP)?**

Your GP will not be involved in this study.

**Further information and contact details.**

If you would like more information regarding research and/or participation in research in general, please contact Graham Hewitt, Research and Governance Manager at the University of Warwick, who can provide you with further information ([G.J.Hewitt@warwick.ac.uk](mailto:G.J.Hewitt@warwick.ac.uk), 024 76151827).

If you would like more information on this particular study you can contact Hanneke Wiltjer via email ([Hanneke.Wiltjer@warwick.ac.uk](mailto:Hanneke.Wiltjer@warwick.ac.uk)). If you would prefer to speak to her please ring 024 76150618, and Paul Kent (Personal Assistant to Professor Kate Seers) will make the necessary arrangements.

If you have any concerns about this study or would like to complain regarding the way you have been treated, please contact

Director of Delivery Assurance  
Registrar's Office  
University House  
University of Warwick  
Coventry  
CV48UW

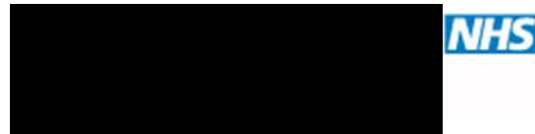
All such letters will receive an initial response within five working days of receipt. If possible, to aid in the speed of response to your complaint, it can be submitted by email (together with any supporting evidence or documentation) to [complaints@warwick.ac.uk](mailto:complaints@warwick.ac.uk).

**Thank you for reading this information leaflet and  
considering taking part in this study.  
If you decide to take part, you will be given a copy of this information  
leaflet and the consent form to keep.**

## Appendix 10, Informed consent form for professionals

Version: 3  
Date: 16-12-2014

Informed consent
Health care professional



Professional identification number:

Title of Project: Understanding the assessment process on a ward for older people.

Researcher: Hanneke Wiltjer

Please initial all boxes

1. I confirm that I have read and understand the information sheet dated 16-12-14, version 3, for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my legal rights being affected. ☐
3. I agree to participate in (initial applicable boxes):
  - Observation ☐
  - An interview which will be digital audio recorded ☐
  - An interview which will not be digital audio recorded ☐
  - A focus group which will be digital audio recorded ☐
4. I agree to the use of direct quotations in presentations and publications provided that anonymity is preserved. ☐
5. I understand that the information I give will be confidential and that my anonymised data and personal details will be stored securely at the University of Warwick. ☐
6. I understand that relevant sections of my data collected during the study, may be looked at by individuals from regulatory bodies or from the NHS Trust, where it is relevant to my taking part in this study. I give permission for these individuals to have access to my records. ☐
7. I understand the limits to confidentiality detailed in the participant information sheet e.g. strategy for dealing with applicants who ☐



demonstrate possible harm to themselves or to others during the course of the study, which includes ensuring patient safety.

8. I agree to take part in the above study.

☐

9. **Optional:** I understand that the information collected about me will be used to support other research in the future, and may be shared anonymously with other researchers.

☐

---

Name of Participant

---

Date

---

Signature

---

Researcher

---

Date

---

Signature

10. I would like to receive a summary of the study's findings, and allow the chief researcher to use my personal details to post or email this summary to me.

☐

Professional identification number:

Address:.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

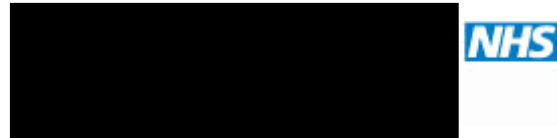
## Appendix 11, Information sheet for patients

### Participant information sheet Patient

#### Understanding the assessment process on a ward for older people.



WARWICK MEDICAL  
SCHOOL



Date: 16-12-2014

Version Number: 3

We would like to invite you to take part in our research study. Joining this study is entirely up to you. Before you decide we would like you to understand why this research is being done and what it would involve for you. This study is led by Hanneke Wiltjer, who is conducting this study as part of her PhD in Nursing, and she will go through the information sheet with you. This will take approximately 15 minutes. Please do talk to others about this study if you wish.

The study aims to find out how older people are assessed in hospital. This involves observation of the care you receive, especially in regard to assessments. We would also like to talk to you and look at written assessments that are made about your care. This will help us identify different views of assessment and how assessment is undertaken in hospital. It is possible for you to agree to observation of your care, interviews, and for us to look at your notes. However you may choose to agree to one or two of these, or you may prefer not to participate. Your decision whether or not to participate will not affect your usual treatment and care on the ward in any way.

The first part of the Participant Information Sheet tells you the purpose of the study and what will happen to you if you take part. Then we give you more detailed information about the conduct of the study.

Please do ask if anything is unclear.

### **Participant information sheet**

#### **What is the purpose and background of the study?**

In this study we would like to understand how the process of assessment works for older people admitted to hospital. The assessment process includes all the questions and any tests healthcare professionals might do during your admission to hospital. These questions and tests help them decide how to look after you. For instance, a nurse asks about dietary allergies as part of an assessment, or a physiotherapist asks whether a stick or a Zimmer frame is used for walking. These questions create a picture of what kind of care and treatment you need during your admission. You have been invited to take part as you are a patient on this ward and have been assessed by the hospital team. We are very interested to hear your views of the assessment process. Taking part in this study will not change the care you receive on the ward.

#### **What would taking part involve?**

It is up to you to decide whether you would like to take part in this study. We will describe the study and go through this sheet to give you all the information you need to decide this. You may choose to take part in any or all of the following activities:

- i) Observations of your care,
- ii) Talking about your experiences,
- iii) The researcher looking at your nursing and medical notes.

i) Observations of care. The researcher will work alongside your nurse and look at the care you receive to get a better understanding of the process of assessment on this ward. The researcher will normally be around for a couple of hours at a time. If you are happy with this the researcher might ask you some questions during observation such as: what was it like when the nurse got you out of bed to see how you walk?

ii) Talking about your experience. The researcher might also ask you if you would be willing to talk about your experience of being assessed. She will ask you what it is like being assessed, what you feel and think about the sorts of activities the staff do. With your permission this will be digital audio recorded so that the researcher can remember what you said. The chat could take up to an hour or less. If you would prefer we could meet several times just for a short time. It is possible for you to receive a copy of what you said when talking about your experiences.

iii) Looking at your nursing and medical notes. The researcher would also like to look at your medical and nursing notes to see what assessments have been written about your care. If you agree for us to look at your notes we will focus on notes about assessments.

Your involvement with the research study will end after the activities you agreed to take part in have taken place.

If you would like a summary of what we have learnt as a result of the study, we are happy to send you this. This may be a couple of years after you have been seen, as we are seeing people over an eighteen month period.

All information that is collected about you will be kept strictly confidential and it will be stored securely at the University of Warwick. Your name will not be used and instead you will be given a study number, which means the information gathered will be confidential and you will not be individually identified. No one other than the research team will be able to link the research data to you personally. If you have provided us with personal data, this will be destroyed when the study has finished. The data and the consent forms will be destroyed 10 years after the end of the study.

You are free to withdraw from the study at any time without having to give a reason. Your withdrawal will not affect the care you receive during your hospital admission.

#### **What are the possible benefits of taking part?**

You may find talking about your care helpful. We hope that the findings of this study will help improve our understanding of assessment of older people when they are admitted to hospital.

#### **What are the possible disadvantages and risks of taking part?**

We are not expecting any disadvantages of taking part. If you find us looking at or talking about your care upsetting, we will stop. You can decide whether you would like to continue after a break or choose another time if you wish to continue. If you do not wish to continue this is alright and this will not influence the care you receive during your admission.

The information you give us will be made anonymous, and only the research team will have access to your personal details. However, in some cases auditors or inspectors might need to see your personal data if they want to ensure the correctness of the study.

#### **Expenses and payments**

It is not expected that you would have any expenses related to taking part in this study.

**How will participation impact on my insurance?**

Your participation will not impact on your insurance.

**What is generic consent?**

If you agree to it, it is possible that the data you give us might be shared in the future with other researchers who are interested in its content. If data is shared this will only be the anonymised data, which means it will not include your personal details.

## **Participant information sheet- supporting information**

### **What if something goes wrong?**

If you have concerns about any aspects of this study, you can ask to speak to the researchers, who will do their best to answer your questions and concerns (024 76150618). If you remain unhappy or have a complaint about how you have been treated during the study, you can log this by contacting the Director of Delivery Assurance. Contact details are at the end of this information sheet.

If you suffer an injury due to participating in this study, the University of Warwick, who acts as a sponsor for this study, has indemnity arrangements in place, and you can contact Mrs Jane Prewett (024 76522746).

If you would like to make a complaint regarding the nursing care you might have received from the researcher during your admission in hospital, please contact the Patient Advice and Liaison Service (0800 0284203, [feedback@uhcw.nhs.uk](mailto:feedback@uhcw.nhs.uk)).

### **What will happen if I don't want to carry on with the study?**

At any time during the study you are able to withdraw from the study. To withdraw you can speak to Hanneke Wiltjer directly, or you can inform your nurse or doctor, who will pass your message on. Withdrawal from the study will not have any consequences for the care you are receiving on the ward.

### **Will my information be kept confidential?**

All the information you give us will be kept strictly confidential. In part one of this information sheet it has been explained how the information you give us will be made anonymous. All the information you give us, data and/or personal information, will be stored securely at the University of Warwick. Your personal details will be destroyed at the end of the study, and the anonymous data and the consent forms will be destroyed ten years after the end of this study.

Only the research team, including Hanneke Wiltjer and her supervisors at the University of Warwick, will have access to your personal details and to the anonymous data. If regulatory bodies or the NHS Trust want to do an audit to ensure the correctness of the study they too will have access to personal details. If, with your permission, data will be shared with other researchers in the future this will only include the anonymous data and not any personal details.

If participants or others suggest possible harm to themselves or others during the course of the study, we might have to breach confidentiality to protect the

participant or others. If during data collection, it becomes clear there is a persistent problem in clinical practice, we will suggest you discuss this issue with a senior healthcare professional or to use the official complaint procedure as outlined on the website of the University Hospital Coventry and Warwickshire. We will undertake the responsibilities of disclosure within the principles outlined by the Nursing and Midwifery Council (NMC 2008). If we encounter care that requires immediate action we will take appropriate steps to ensure patient safety.

All procedures for handling, processing, storing, and destroying data are according to appropriate legislation, such as the Caldicott Principles and the Data Protection Act.

#### **What will happen to the results of the research study?**

The results of the study will be written up and published in a health related journal and at health related conferences. In these publications the researcher may use quotations from participants, but she will make sure these cannot be linked to individual people. We will also talk to the staff about the study so that they can use the findings as part of their practice development. It is possible for you to receive a summary of the findings by filling in your contact details at the end of the consent form. At the end of the study the researcher will email or post this summary to you using the personal details you provided, after which your personal details will be destroyed. If you do not wish to receive such a summary you do not have to give your personal details to the researcher.

#### **Who is organising and funding the research?**

This study is conducted by Hanneke Wiltjer, PhD-student at the University of Warwick. She is supervised by Prof. Kate Seers and Dr. Liz Tutton.

#### **How have patients and the public been involved in this study?**

Members of a patient group have provided feedback on the study while it was still in the developing stages. AgeUK will be involved in spreading the findings of the study.

#### **Who has reviewed the study?**

Before we started, this study has been reviewed by the National Research Ethics Service West Midlands- Coventry and Warwickshire, who make sure that the research is fair.

#### **Consent process**

If you agree to take part, we will ask you to sign a consent form. You are free to withdraw from the study at any time without having to give a reason.



Your withdrawal will not affect the care you receive during their hospital admission. We will give you a copy of the signed consent form, and we will keep the original in a locked cabinet at the University of Warwick. This document will be destroyed ten years after the end of the study.

**What if relevant new information becomes available?**

If relevant new information becomes available that changes the need or the content of our study we will adapt our research accordingly.

**Involvement of the General Practitioner/ Family Doctor (GP)?**

Your GP will not be involved in this study.

**Further information and contact details.**

If you would like more information regarding research and/or participation in research in general, please contact Graham Hewitt, Research and Governance Manager at the University of Warwick, who can provide you with further information ([G.J.Hewitt@warwick.ac.uk](mailto:G.J.Hewitt@warwick.ac.uk), 024 76151827).

If you would like more information on this particular study you can contact Hanneke Wiltjer via email ([Hanneke.Wiltjer@warwick.ac.uk](mailto:Hanneke.Wiltjer@warwick.ac.uk)). If you would prefer to speak to her please ring 024 76150618, and Paul Kent (Personal Assistant to Professor Kate Seers) will make the necessary arrangements.

If you have any concerns about this study or would like to complain regarding the way you have been treated, please contact:

Director of Delivery Assurance  
Registrar's Office  
University House  
University of Warwick  
Coventry  
CV48UW

All such letters will receive an initial response within five working days of receipt. If possible, to aid in the speed of response to your complaint, it can be submitted by email (together with any supporting evidence or documentation) to [complaints@warwick.ac.uk](mailto:complaints@warwick.ac.uk).

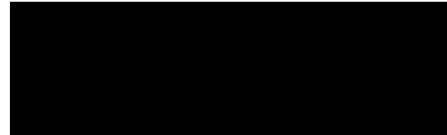
**Thank you for reading this information leaflet and  
considering whether you would like to take part in this study.  
If you decide to take part, you will be given a copy of this information  
leaflet and the consent form to keep**

## Appendix 12, Informed consent form for patients

Version: 3  
Date: 16-12-2014

Informed consent
Patient

THE UNIVERSITY OF  
**WARWICK**  
WARWICK MEDICAL  
SCHOOL



Patient identification number:

Title: Understanding the assessment process  
on a ward for older people.

Researcher: Hanneke Wiltjer

Please initial all boxes:

1. I confirm that I have read and understand the information sheet dated 16-12-2014, version 3, for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected. ☐
3. I agree to participate in: ☐
  - Observation ☐
  - An interview which will be digital audio recorded ☐
  - An interview which will not be digital audio recorded ☐

- I give permission for individuals from the research team to have access to my medical and nursing notes. ☐
- 4. I understand that relevant sections of my medical and nursing notes and data collected during the study may be looked at by individuals from regulatory bodies or from the NHS Trust, where it is relevant to my taking part in this study. I give permission for these individuals to have access to my records. ☐
- 5. I understand that the information I give will be confidential and that my anonymised data and personal details will be stored securely at the University of Warwick. ☐
- 6. I agree to the use of direct quotations in presentations and publications provided that anonymity is preserved. ☐
- 7. I understand the limits to confidentiality detailed in the participant information sheet e.g. strategy for dealing with applicants who demonstrate possible harm to themselves or to others during the course of the study, which includes ensuring patient safety. ☐
- 8. I agree to take part in the above study. ☐
- 9. **Optional:** I understand that the information collected about me will be used to support other research in the future, and may be shared anonymously with other researchers. ☐

_____	_____	_____
Name of Participant	Date	Signature

_____	_____	_____
Researcher	Date	Signature

10. I would like to receive a summary of the study's findings, and allow the chief researcher to use my personal details to post or email this summary to me.

☐

Patient identification number:

Address:.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

## Appendix 13, Confirmation of sponsorship

Miss Hanneke Wiltjer  
Health Sciences  
Warwick Medical School  
University of Warwick  
Coventry  
CV4 7AL  
United Kingdom

**Warwick**  
Medical School

3<sup>rd</sup> November 2014

**Project Title:** Understanding the Assessment process on a ward for older people  
**Chief Investigator:** Miss Hanneke Wiltjer  
**Our Ref:** REGO-2014-905

Dear Miss Wiltjer,

I confirm that the University of Warwick will act as Research Sponsor for the above project, in accordance with the Department of Health's Research Governance Framework for Health and Social care (2005), and, where appropriate, UK Statutory Instrument Number 1031, that implements the Medicines for Human Use (Clinical Trials) Directive 2004 and subsequent amendments.

I confirm that the University holds Public and Products Liability Insurance, and, where appropriate, Clinical Trial Insurance, which will provide cover for this study.

Any researcher involved in the project is required at all times to comply with the University of Warwick's Research Code of Practice.

Best wishes



Graham Hewitt  
**Research Ethics and Governance Manager**

Dean's Office & Professional Support Services  
Warwick Medical School



T: + 44 (0) 24 7615 1827  
E: [G.J.Hewitt@warwick.ac.uk](mailto:G.J.Hewitt@warwick.ac.uk)  
W: [www.warwick.ac.uk/wms](http://www.warwick.ac.uk/wms)

Medical School Building  
The University of Warwick  
Coventry CV4 7AL United Kingdom  
Tel: +44 (0)24 7657 4680  
Fax: +44 (0)24 7652 8375

THE UNIVERSITY OF  
**WARWICK**

## Appendix 14, Characteristics of patient participants

Patient number	Gender	Age	Admission length on this ward
1	Male	93	21 days
2	Female	82	7 days
3	Female	89	5 days
4	Female	79	12 days
5	Female	74	3 days
6	Female	86	60 days
7	Female	88	9 days
8	Female	78	7 days
9	Female	75	10 days
10	Female	72	18 days
11	Male	89	30 days
12	Male	67	18 days
13	Female	100	10 days
14	Female	87	4 days
15	Female	80	11 days
16	Female	87	8 days
17	Female	85	2 days
18	Male	93	38 days

Average age= 83.5, Average length of stay =15.2 days

Note: most bays are female, although it shifts per week. But usually at most only two bays of the seven bays are male.

## Appendix 15, Examples of coded raw data

Excerpts of raw data	Initial coding	Code
HCP 1: I think, I think that is down to me. Uhm, if I have done like, I look at their (end of bed) and I speak to the patient, if, you know, I have done my own risk assessment. If it is if something is niggling at me say or something is not quit right, you know that if I feed, if they said the patients is a feeding and she is a normal diet, and you are feeding her and she starts coughing and choking, and I would stop and I would think hold on a minute is that right? And then I would go refer to the notes before I would ask the trained, because the dietician would have documented in there. So, if (#) say was busy, I could get the same answer from the notes as if I ask (#), but if (#) is busy on the ward round and pills and you are better off sometimes just checking for yourself in the notes because it is probably what (#) would have done anyway.	Sources of information- asking patient Niggling feeling-Informally assessing Sources of information- observing patient Sources of information- notes Sources of information- colleague Assessment depending on availability colleague- context dependent Role and position of HCP	Elements of assessment- knowing Ways of working Elements of assessment- knowing Daily ward life Networking between professionals
HCP 15: Well usually I just start by asking how they are at the moment, how they are feeling today. Um, because then if their main problem is pain or breathlessness, hopefully that will come out first of all. And also, if it turns out that they have got dementia or they are acutely confused, their answers might start to point you into that direction as well. And then, kind of you let them, sometimes they are not very talkative either, so then you have to probe a bit more from what you have already read and go through what you are	Sources of information- asking patient Assessing patient with cognitive impairment Combining sources of information	Elements of assessment- knowing Meeting individual patient needs





<p>R: And you are independent in the morning with your washing and dressing?</p> <p>P 9: oh yes. I showered on my own from, oh one day it was a laugh because um, the, um I don't know, second day maybe, um this lady came in and I said: "could I have a shower please". And, because I already one the day before. And she said "of course". Anyway, she goes out, comes back in all kitted out and I thought, I said to her "I am alright on my own, I can manage, I am fine, I am independent". I was in there like a shot, and she showered me down, and washed my hair and everything, um, so I said: "oh thank you ever so much for that". But the next morning I was up really early and I got in there and I was showered.</p> <p>R: very good. Did you mind that she helped you?</p> <p>P 9: no ... I have got no embarrassment whatsoever coming in hospital. Because I have been in several times and when I come into hospital I put my body in their hands because it is no good fretting. It is no good fretting about it.</p> <p>R: you put your body in their hands?</p> <p>P 9: Yeah I think, this isn't my body, well it isn't for a few days now, because it is theirs.</p> <p>P 8: I would ask them [doctors] question because I want to know what is going on, I want to know how it is going to affect me afterwards. And I, the young doctor, because she is medical, she didn't know the surgical side of it. So, I don't know what is going to happen with the surgical side. I might</p>	<p>Sources of information: patient</p> <p>Role of the patient: Unheard patient</p> <p>Patient happy with independence</p> <p>Role of the patient: Dependent patient</p> <p>Role of the patient: Dependent patient</p> <p>Role of the patient: Uninformed patient</p> <p>Separation of care processes</p> <p>Role of the patient: Uninformed patient</p>	<p>Elements of assessment-understanding</p> <p>Elements of assessment-knowing</p> <p>Networking between professionals and patients-role of the patient</p>
---	---	--



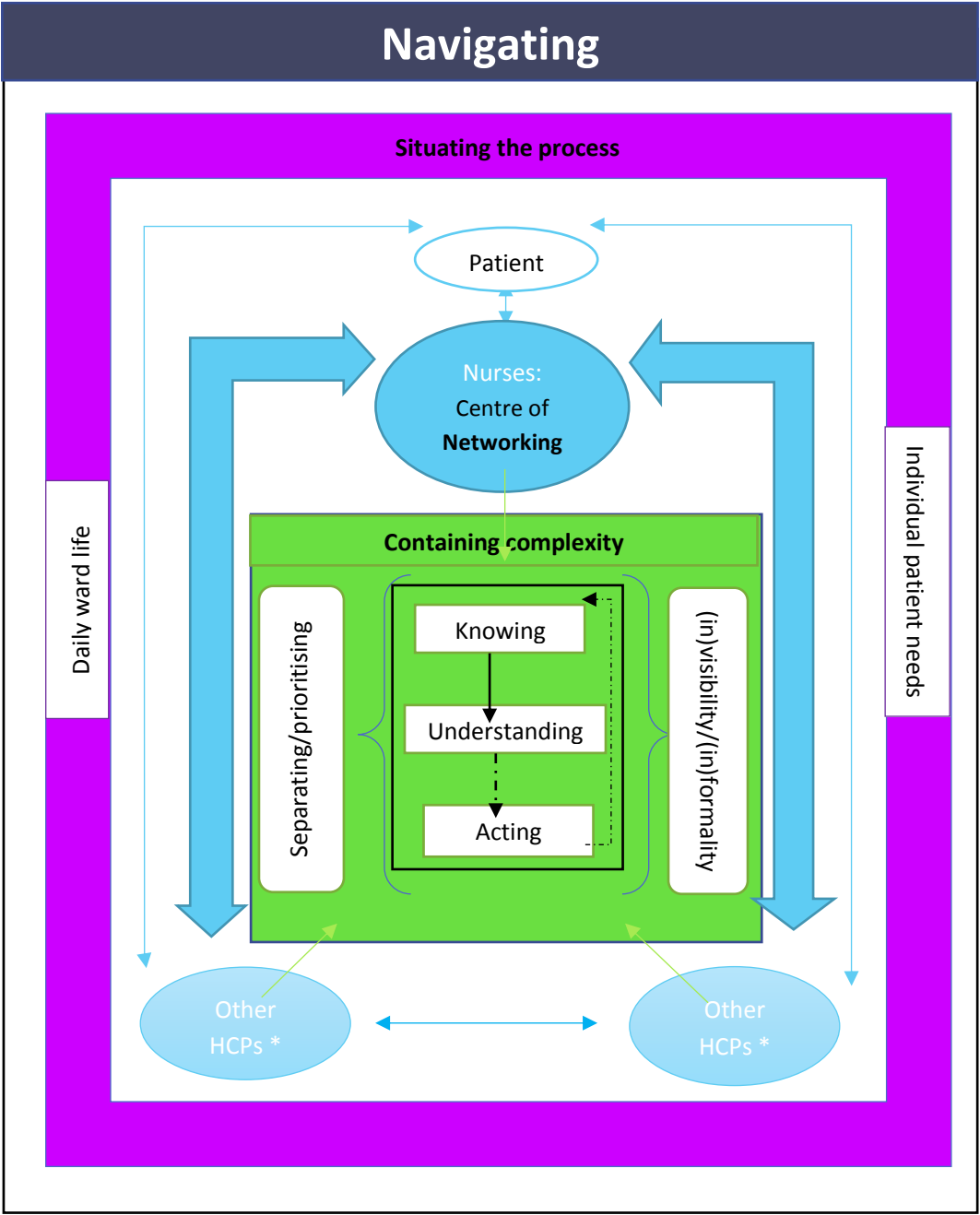
**The following pages present the three tables including themes and codes (Table 5, 6 and 7), as well as the conceptual framework ‘Navigating’ (Figure 3). These pages can be folded out.**

Table 5, Codes within theme 'Containing complexity'.		
Theme	Codes	Sub codes
Containing complexity	Elements of assessment	Knowing
		Understanding
		Acting
	Ways of working	Levels of formality
		Levels of visibility
		Prioritising and separating care processes into tasks
		Task oriented approach
	Managing competing demands	

Table 6, Codes within theme 'Networking'.		
Theme	Codes	Sub codes
Networking	Networking between professionals	Multi-disciplinary teamwork
		The role of the nurse
		Verbal communication
		Written communication
	Networking between patients and professionals	Professionals updating patients
		Involving patients in decision-making

Table 7, Codes within theme 'Situating the process'.		
Theme	Codes	Sub codes
Situating the process	Meeting individual patient needs	Individualising patient care
		Assessing patients with cognitive impairment
	Daily ward life	Practicalities
		Practice guidelines

Figure 3, Conceptual framework of ‘Navigating’



\*Includes a number of disciplines such as physicians, therapists, therapist assistants, nurse specialists, HCAs, activity coordinators

- Theme: Containing complexity
- Theme: Networking
- Theme: Situating the process